

THE PRIMARY SCHOOL

HOW TO IMPROVE ITS ORGANIZATION AND TEACHING

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**TO THE BEST TEACHER
OF MY CHILDHOOD
MY MOTHER**

PREFACE

THIS book is the outgrowth of work with many classes in primary education in which the author has always tried to make theory immediately serviceable in the evaluation of practice. A similar approach is attempted here. Prevalent defects in childhood education are pointed out for the purpose of finding a remedy. The superior organization and instruction which are being developed in many of our public schools is described in order to help others to recognize the steps of progress. An effort is made to show that modern theories of education are workable wherever directed by intelligence and good-will.

Grateful acknowledgment is made to the many students who, through class discussion and through reports and correspondence after leaving college, have helped the author to keep in touch with current problems in a wide field. They are appreciatively remembered, although their names cannot all be mentioned here.

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INTRODUCTION

BY FRANK M. McMURRY

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THERE is almost as much confusion in the field of education at the present time as in that of polities; for education, like government, has been undergoing many radical changes.

Our conception of what a child is has been wonderfully modified in the last forty years. Up to forty years ago, children had been little studied, because it was doubtful if they were worth it. In our attitude toward them we had been under the influence of the old Greeks, who threw away children who did not promise to reach the adult state in full vigor. In itself childhood for them possessed no particular merit or dignity. It is true, we did not throw them away; but we did think of them as finding their goals in adult life, and their education meant only the acquisition of such facts and skills as the distant future might require.

Then G. Stanley Hall began a study of the contents of children's minds; and gradually children became worthy objects of study, just as plants and animals had long been. In consequence, many very important facts have slowly dawned upon educators. Children as truly feel and purpose and think, within their range of experience, as adults do. They are as truly citizens as adults are. Their dignity is not something granted to them on account of promises they make for the future, but is inherent in them now. In reaching these conclusions educators have, no doubt, been influenced by the attitude Jesus showed toward childhood, although certainly the full meaning of His teaching about children is not yet understood.

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The zeal with which hundreds of professors of education are now attempting to measure the intelligence of children is a striking witness of this change. Formerly no one inquired what native abilities or aptitudes children brought with them to school. We were not interested at that end. What we cared for was what we were going to make out of them; the goals; the ends to be reached. The fact that the native characteristics are now considered as worthy of so much attention, being the foundation on which the educator must build; and the fact that each child is so much unlike all others that he is worthy of individual attention in this respect — these two facts show to what a wonderful extent children are coming into their own.

Since children are found to be so different from what they were once supposed to be, their education must be undertaken in a different way. Even the very aim of education must be differently conceived. While scholarship used to be, perhaps, the best expression of this aim, citizenship tends now to take its place. That term suggests that it is what the child gives out, in the form of conduct, rather than what he takes in as knowledge that is the main concern of the educator. Knowledge in this case is not omitted or neglected; but it is subordinated. Energy to think, and the tendency to carry thought into practice, have become two things that receive far more consideration than formerly.

Such aims as these require very radical changes in the curriculum. Forty years ago the normal child in the first grade was likely to have beginning reading four times per day; beginning number, four times; writing, four times, and spelling, the same number; and that was all. The first defect in such a curriculum to-day is the absence of stimulating ideas. In order to appeal to the tastes of children, in order to arouse their ambitions and inculcate purposes so that they will have energy to think and plan and do, new kinds of

subject-matter must be selected. Not only must more stimulating subject-matter be studied, but it must be more plainly a kind that identifies the child with social situations as well. Such demands as these are difficult to satisfy, but they are now persistent and pressing.

All this means that educational ideals are much higher than formerly, and, therefore, much more difficult of attainment. Indeed, there is much cause for alarm at present, because the theory of education of children has advanced so far beyond prevailing practice that the two are hardly within sight of each other. A revolution has taken place in our theory, and prevalent practice has hardly been able to keep even in touch with it.

One result is that a great many of the teachers have never become inoculated with the new ideas; or, if they have to some extent, they have become discouraged over the situation and abandoned hope of benefiting by further study of education. The task is too great for them.

And even among the more progressive teachers there is much confusion. Many of the abler and more ambitious ones, in endeavoring to keep up with the advance by applying the new ideas in the classroom, are doing less effective work now than formerly. They have let go of much that was good, though old, and have not mastered the new sufficiently to make it good. Very many of the so-called "modern schools" are showing practices that make intelligent parents and supervisors almost despair.

Probably the most difficult ages for the application of modern educational theory are those of the children in the kindergarten and primary grades. Yet it is there that attempts to make such application have been most active and persistent.

The author of this volume has had extensive experience as a teacher in kindergarten and in primary schools; as a super-

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visor of those two departments; and as a college professor of modern educational theory as related to those departments. She is, therefore, remarkably well equipped to show the relation between broad theory and classroom procedure.

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CHAPTER I

DOES THE SCHOOL ENVIRONMENT FIT THE CHILDREN?

SUPPOSE schools had never been thought of and, without prejudice of any kind, we were to set about to provide an environment and such instrumentalities as would best aid in the growth and training of the young children of this generation. Let us try to forget for a time all we know about schools as they exist, cease to image those we attended, those in which we are teaching, and the one on the next block. For the moment these have vanished, and it has devolved upon us to attempt to provide suitable conditions for the education of children from five or six years to nine or ten years of age.

What sort of provision shall we make and what shall be our first consideration? Common-sense dictates that we proceed as is customary when the life and well-being of any growing animal or plant is concerned — find out all that we can about the creature or organism, its nature, its needs, what has brought it to the present stage of development and the changes incident to the maturing process. To solve our problem, then, we should naturally draw upon all the empirical knowledge concerning childhood, derived from accumulated human experience and upon the very considerable scientific data furnished by psychologists, physicians, and specialists in social science. What kind of creatures are these children? What progress have they already made before coming into this proposed ideal environment? What

aided the progress? If we take them for a good part of the day out of their natural environment can we provide another as good in every respect and better in most respects for their development? And what shall this especially devised environment be like?

As to child characteristics, ask any intelligent adult to pick out the most marked and universal trait of normal, healthy children and he will almost certainly point to their ceaseless and varied activity of body and mind. Physical activity is almost incessant from the earliest random kicking and clutching to the expert running, skipping, dancing, and climbing of later years. Active mental life is no less manifest from later infancy on, as shown by eager attention to surroundings, by questions and remarks, and by intelligent actions. Children must always be doing something, especially with the hands. They are interested in things animate and inanimate, and are continually trying to investigate, explore, and construct. From early infancy to later years they like to go, thus manifesting a distaste for monotony and a marked liking for movement, for new experience and for change of scene. They like to follow grown-ups around and try to do many of the things their elders are doing, and in the same way. The companionship of other children is also sought, and it is constantly remarked that even babies recognize and are attracted to other babies or older children. In later childhood this casual companionship resolves itself, under favorable conditions, into small neighborhood groups for play and for mutual plans and schemes of interest to all.

The mere novice may readily notice the earnestness and zeal of children in their own undertakings and the persistent and sustained effort often put forth to accomplish what is desired. The unspoiled, healthy child is never a passive, helpless creature waiting to be told everything and to be

served. He is, on the contrary, inventive, ingenious in contriving ways and means to accomplish his purposes, and eager to do things for himself. Children are industrious, at least when their own "business" is concerned, and are bored and unhappy when occupation is lacking or of a kind decidedly below their powers. In brief, normal, healthy children are not by nature lazy.

PRE-SCHOOL ENVIRONMENT AND ACHIEVEMENT

At the age for which we propose to devise an especially adapted environment called the school, our small patrons of normal intelligence have already made remarkable advance in their own education. What they know and can do would be astonishing to us if our perceptions were not dulled by occurrences grown commonplace. They will never again in any other five years make such progress in the mastery of the mother-tongue; they will never advance at an equal rate in gaining control over their own bodies; the senses have received and the brain has recorded we know not how many impressions of form, color, size, texture, sound, and the basis has been laid for judgments of quantity, direction, and relationship. Many children have learned social behavior of a high order, and all but the slowest and least experienced have a fund of useful, though not very well-organized, information. Any school which could show an equal advancement on the part of its pupils in a period of three or four years would be marked for special praise. But, it is objected, there is a fallacy in such expectations, since the years of early childhood are those in which human instincts are powerfully at work, and native powers and abilities will expand and develop without intervention and even in spite of obstacles. That is true to a considerable extent as regards sensory and motor abilities, but children subjected to inferior institutional life show very plainly how even these

functions may be retarded and how much their mental attainments depend upon the right sort of stimulus and guidance. There is a learning process and a teaching process going on through the pre-school period, and perhaps it would be advisable, instead of throwing these into the discard in planning our school, to note some of the features which have made them notably successful.

Highly important among these factors is the freedom accorded the growing child. He moves about in his small world devising occupations, discovering new objects and fresh aspects of his surroundings, talking to any one present, and busy from morning till night with concerns that seem to him interesting and worth while. In the average home this freedom is not simply of the negative kind, which consists in the removal of unnecessary restraint, but it is of a positive type including the provision of an interesting and fairly suitable equipment of furniture, toys, and simple materials and tools ready for childish employment. The most developing conditions would include suitable playmates. If the health of children is guarded, and if in addition there are sympathetic and understanding older people in the family group who make real companions of the children, sharing and enlarging their experiences and placing some responsibilities on them, the conditions essential for normal growth and expansion of powers seem to be fully provided for these early years.

Does any one believe that the characteristics described above are useless and undesirable, or that they are outgrown by the time the child is old enough to enter school? Does any one question the value and the general soundness of the educational policy noted in the pre-school period? Eminent authorities in the psychology of childhood tell us that all the traits here mentioned are strongly operative at the period under discussion, and that it is only through the exercise of

this original nature and through the prompt and timely provision of suitable stimuli for such exercise that economical and efficient education is possible. This being true, then, some such procedure as that in a good home, with additions and modifications, will be essential in the school plans which we are to propose.

WHAT SORT OF SCHOOL ENVIRONMENT DOES THE ORIGINAL NATURE OF CHILDREN DEMAND?

/ Freedom with rich opportunity for varied activities should be the first requirement. ✗ To say nothing of the physical effects, it is doubtful whether children can grow at the highest rate mentally if confined to a desk and kept in rather a barren environment four to five hours a day. Certain it is that desirable social activities and habits cannot be obtained under these conditions. As in the good home, this freedom must be genuine and positive, carrying with it abundant opportunity for wholesome educative work and play for individuals and for groups, and not omitting the responsibility and deepened social consciousness which is always a part of true freedom. (We cannot remind ourselves too often that mere removal of restraint in an impoverished situation, and without heightened self-control and mutual good-will, is not real freedom.)

In our school there must be many interesting things of all kinds to do — more and better than the children could find or invent for themselves if left alone, more and better than any but the most exceptional home is capable of furnishing. To this end there must be materials of great variety. If it is through the evolution of man's hand that the human race has risen to its high estate, it is, as well, through the surrounding world of flexible materials amenable to his will and ready for the exercise of hand and mind. Anthropologists point out that the hand itself would never have evolved if

there had been no roots, bark, berries, nuts, twigs, stones, and soil, or the equivalent, for man's manipulation and for the realization of his rudimentary purposes. While children have passed beyond this most rudimentary stage before they enter the kindergarten, at no point during the primary-school period should they be deprived of plastic, easily modifiable materials, capable of suggesting interesting projects and yielding both temporary and permanent forms and constructions according to the worker's purpose and design.

Toys and apparatus of an educative kind should be furnished, and attractive picture and story books of all kinds suited to the maturity of the children should be at hand in addition to the best textbooks.

Opportunities for social intercourse in school should be better than the average child enjoys outside, because, when so many children are brought together and when so many supposedly expert and trained adults are associated with them, conditions are offered for bringing out the best that the most gifted as well as the least endowed of the group have to offer. In addition, the varying ages represented in the grades make possible the passing on to the younger of ideas, suggestions, and plans which otherwise would not arise. To this end, there must be abundant opportunity for intercourse within the class groups and between grades so that individuals and classes may see and know what others are doing, may learn from each other and thus come to appreciate and imitate what is worth while. (Opportunity should be given for children to draw together into self-organized groups for work and play, to mingle, compete, help, oppose, lead, submit, as they do in outside life,) the difference here being that there is more certain to be some reckoning of the results of this intercourse and some guidance from a mature companion. There should be greater assurance in school than in the less-organized life outside

that what is best in each individual and group is encouraged for the benefit of all.

(The best schoolroom is too narrow for full growth, just as the home is too narrow. Children need to be led out into the surrounding world of shop, industry, civic life, museum, park, farm, into all those places to which the intelligent father likes to take his children, but which all too few have the opportunity to see and enjoy.) Getting out of the schoolroom into the school-whole also helps to provide scope for expanding interests, just as taking the baby from the nursery into the family living-room brings stimulating experiences. The greater the school activities and the wider the associations for all grades, the better for the youngest as well as the oldest pupils.

WHAT SORT OF ENVIRONMENT IS QUITE COMMONLY PROVIDED?

At the beginning of this chapter we tried to set aside the image usually called up of the average primary schoolroom, in order that we might better consider what type of environment the nature of children seems to demand. Bring back now as vividly as possible that very common type of room. Does it fit the living organism described? Does it provide for obvious needs in the way of stimulus to a full and active physical, intellectual, and social life? Or are we in reality still bound heavily in our practice by tradition, convention, and preconceptions in the face of well-understood and generally accepted facts of child nature and growth?

Go from one city to another, chosen at random in different parts of the country, until you have visited ten or twelve. In each city enter several primary classrooms, also chosen at random, and remain a part of the morning. This will give a fair sampling of current practice and the above questions may be fairly answered. Fuller reports of such observations

will be given in Chapters II and VII. Here our purpose will be served by merely mentioning a few outstanding features of a large percentage of our primary schools.

Visit one of these rooms before the children enter in the morning and ask yourself, "For what sort of creatures is this environment designed? Is it for very old men and women who are willing and ready to sit still, and who, having exhausted the experiences of the outside world, are glad to shut it out? Are the expected occupants (who will enter in a few minutes) to see anything, do anything, make anything, talk to any one, find out anything for themselves?" It seems not. There are no half-completed objects about, no evidence of childish schemes under way. Everything seems well calculated to cut off stimulations of all but a highly selected and limited type. In an incredible number of cases there is no flexible material for the child's use above the kindergarten except the very limited amount employed under close direction at the regular Industrial Arts or Fine Arts period. In too many cases even this is not in evidence. All of that free manipulation out of which comes creative work, plan, invention, design has evidently ceased for the child in this sort of school. The fixed desks still found in a large majority of first-grade and second-grade rooms, and all but universal above second, discourage all genuine social intercourse and any but the most formal sort of physical activity. If you enter a formal first-grade of the better type you may see a more or less attractive-looking reading-chart, some of the more interesting reading textbooks, a few other good books, some pictures on the wall, and perhaps some plants in the window. In many such rooms you will find scissors, colored crayons, paper and paste. This better sort of equipment is far from universal, and is, furthermore, all too meager and restricted for the vivid, eager, energetic, out-reaching nature of children. It seems clear that the average primary school

has not been planned and organized after a careful study of the young creatures to be accommodated, but is largely the product of inherited practice and of the old psychology.

There is some evidence that the physical well-being of young pupils is sacrificed under the conditions which quite commonly prevail. On this point Lewis M. Terman¹ has collected considerable evidence which he sums up as follows:

Is the influence of school life sufficient to affect growth in height and weight? The data seem to justify an affirmative answer, particularly as regards the period immediately following school entrance. That the initiation of the child into the life of the school should prove such a profound shock as to affect the growth of the entire body forcibly suggests the desirability of reforms that will make the transition from home to school more easy and natural. There is no reason why the school should be less healthful than the average home. It ought to be more healthful than the average home, and until it is made so the campaign for school reform should continue. Open-air classes point the ideal by demonstrating that it is as possible for the school to create health as to destroy it.

WHAT SORT OF ENVIRONMENT DOES THE KINDERGARTEN FURNISH?

If we should happen to look into a kindergarten room before school, things will be found to be quite different. It will usually be large in proportion to the number of seats provided, and there will be a sense of space and freedom for movement incident to the type of furniture employed. This will be of a movable sort, indicating that the occupants are not expected to remain in one spot. The chairs will probably be arranged in such fashion as to suggest social intercourse, and the tables will be large enough to serve for real work. Finished work in great variety and partly completed schemes of construction will usually be seen. A glance into

¹ Terman, Lewis M.: *The Hygiene of the School Child*, chap. iv, p. 43.
Riverside Textbooks in Education. Houghton Mifflin Company.

the ample closets and cabinets will reveal an absolute or a relative wealth of materials of all kinds — blocks, clay, wood, textiles, paper, cardboard, toys, crayons, scissors, paste, paint, dishes and other small housekeeping utensils, picture books, small musical instruments, and other innumerable objects of interest. There is almost certain to be a piano in this room. Everything indicates that the children are to be participants in an active, happy, industrious, community life.

If we should look into high-school rooms in the same system of schools we should be likely to find laboratories, workshops of several kinds, sewing-rooms, gymnasium, a library, printing-press with a school publication under way, and evidences that many connections have been established with the outside world of affairs.

What are we to infer from these contrasts? Are we to assume that children cease suddenly at about six years of age to care to investigate, construct, communicate, play, and work actively together and to learn by first-hand experience? That they have become all at once sedentary in disposition and almost wholly occupied with the desire to learn to read and write? That at thirteen or fourteen years of age or thereabouts there is a revival of the more active, dynamic tendencies which the school feels obliged to meet? A visitor from Mars might fairly reach such conclusions, and his escort might find it difficult to explain the philosophy back of the primary school.

When shall we begin to apply widely, consistently, and generously what many parents and all well-trained teachers know regarding the needs of child life?

WHAT IS THE OUTLOOK FOR THE FUTURE?

A number of private experimental schools in recent years have practically started with a clean slate. They have re-



FIG. 1. FIRST GRADE, FAIRFAX SCHOOL, CLEVELAND HEIGHTS, OHIO

Showing children engaged in chosen activities — block construction, painting, clay modeling, woodwork, costume-making, playing grocery store, etc. This represents one period in the day. Individual and group projects going on often connect with leading features of the curriculum.

jected the furniture, the meager equipment, the formal organization, and a good part of the curriculum of the traditional primary school, because they have rejected most of the theory upon which such practice was based. Those in control of such experiments are scrutinizing afresh the curricula and methods of education in order to select with intelligent purpose those factors best conducive to the traits, habits, and attainments most desirable for young citizens of to-day.

The machinery of our great public-school systems is heavy and unwieldy. Nevertheless, there is abundant proof that leaders in this field have gradually effected marked changes in line with modern educational thought. Here and there all over the country in public schools is to be found primary work that rivals in every way that of experimental and demonstration schools of high reputation. Only a few cities have as yet been able to reorganize all of their primary work, but in many places certain schools and particular classrooms are able to show happy childhood engaged in the business of life under ideal conditions. There is a tendency in new buildings to provide large, bright rooms. Tables and chairs are taking the place of fixed desks, because they permit bodily ease and freedom and encourage natural human relations. A much richer and more stimulating equipment makes possible genuine play and whole-hearted work of a varied character. Public-school classrooms of this type are shown in Figs. 1 to 4.

Dead material is being discarded from the curriculum to make place for vital experience and a content well designed to awaken and nourish the best in child life.

It is the purpose of the next chapter to show in some detail various types of current practice and to apply to them the standards presented above.

QUESTIONS

1. What are the outstanding characteristics of a normal, healthy child of pre-school age?
2. What features of the learning process of the pre-school period would we do well to incorporate in the teaching process of the school? Justify this selection of school environment for the six-year-old.
3. Contrast the first-grade room that you know best with the kindergarten room. Can you offer any sound reasons for the difference?
4. What are some of the steps necessary in order to secure the best kind of environment for primary children?

CHAPTER II

SOME TYPICAL EXAMPLES OF ENVIRONMENT AND PRACTICE — WHICH SHOULD PREVAIL?

THE question proposed in the preceding chapter, together with some general description of prevailing conditions in primary grades, was intended to serve as an introduction to the records of actual observations in classrooms here presented. So far as accurate and painstaking accounts given by competent observers will suffice, readers will now be taken into schoolrooms and shown widely varying types of current practice for the purpose of judging their relative worth and soundness.

Two of the observations here described were made by the author as chairman of a committee in the National Primary Council concerned with the study of current practice in primary schools. The others were made by the author assisted by Teachers College students in further pursuit of the same question. The results of the Primary Council investigation were published by that organization as a *Bulletin*,¹ and it is from this report that the first two records were taken.

Visitors spent all or nearly all of one session in each room described, noting what was done by teacher and pupils, how these activities originated, the kind of control exercised, the character of furniture and equipment, and the provision for meeting the native interests and tendencies of children. From a large number of such visits made in various parts of the country, it is believed that the six descriptions offered

¹ *Bulletin*, vol. iv, no. 3, National Council of Primary Education, February, 1921. Columbia, Missouri, 1211 University Avenue.

here represent about the widest possible range of practice provided by our public schools.

The first observation is representative of a military type of organization as found, in this instance, in the lower grades of a large city system. The teacher here is absolute dictator. The environment is barrack-like in its severity. The small conscripts seem to be kept at "setting-up" exercises of a mental sort most of the time. It is quite clear that this school is dominated by the conception that early education consists in the acquisition of the superficial features of a few intellectual skills. The method used, the environment provided, and the kind of control exercised all fit the theory admirably. The "pouring-in" process and the attempt at fixation by sheer repetition are fully exhibited.

The only social-moral response the observer could see was that of instant obedience to command while in the presence of the commander.

First Observation

First Grade. City Public School.

Forty-three children present. Floor space almost entirely covered by fixed seats and desks. No material of any kind in evidence, no finished or unfinished work in sight. A few inferior pictures on wall and some large number-perception cards on which were pasted groups of colored circles with corresponding statement, such as $3 + 4 = 7$, printed on them, a set of First Readers on the teacher's desk and drill cards for sight-words, phonics, and arithmetic; another set of Readers in the children's desks. The entire class was treated as a whole, and all were expected to give full attention all the time.

- 8.40** Pupils filed in silently, took off wraps, took seats, folded hands behind them.
- 8.45** Formal exercises in penmanship at desks with pencil and paper. Exercises were of the "push-pull" type. Small letters of alphabet made from dictation and imitation.
- 9.05** Singing (two minutes).

- 9.07 Formal physical exercises performed in aisles according to teacher's directions.
- 9.10 Arithmetic. Formal drill intended to fix addition combinations through the threes. Counting. Reading numbers. Written exercises in which addition tables were formulated, some pupils at board, others at seats. No applied number. This period of *forty minutes* was broken once by call for arm movements, an exercise lasting less than a minute and performed in a sitting posture.
- 9.55 Filed out of room to basement and back.
- 10.05 Five or six children called upon to recite rhymes designated by teacher.
- 10.13 Formal phonic exercises and rapid drill in the recognition of words and phrases printed on cards. Every device known to the teacher of beginning reading calculated to secure quick response to minute elements was used. It was a rapid-fire, eyes-on-the-teacher drill, which lasted an hour and five minutes, broken twice by physical exercises occupying a total of *two minutes*. The first break occurred at 10.36, and consisted of a playful exercise in the aisles directed by the teacher. The second occurred at 10.55, and consisted of a few arm movements, pupils seated.
- 11.18 An active exercise involving quick change of seats, under teacher's direction (one minute).
- 11.19 Reading. Selection designated by teacher. Children seated at desks were called on one at a time and told to read one, two, or three lines. Not a question asked or a remark made regarding the thought by either teacher or pupils.
- 11.50 An unexpected call for general assembly came from the office, class work for the day was suspended, and pupils passed out in regular ranks. Normally, this grade would have been dismissed at 12.20. When asked what the nature of the work would have been at this last period, the teacher said, "More reading, or whatever I think the class needs."

At all times when seated, except when writing, handling cards, or reading, pupils were required to keep arms behind back and were continually admonished to "sit tall." According to a conservative estimate, all the children sat in this posture at least a third of the time, and the "good" children

held this position at least half the time during the entire morning. The varnish was worn off the backs of the seats where annual generations of small perspiring hands had been pressed.

The second observation shows very formal work, but less of the military, lock-step drill than was noted in the first case. Here the class was much smaller, but no advantage was taken of the extra space. Two divisions were formed according to pupils' attainments, thus showing some regard for individual differences, but no attempt was made to employ the energies of the group not engaged in a lesson with the teacher. Note the amount of time absolutely wasted throughout the day. Whoever planned, approved, and directed this school subscribed completely to the idea that children have within themselves no powers for self-education and self-direction. In spite of the relatively small class, there was not the slightest opportunity for real freedom and choice and no training in the beginnings of how to study. The school is one to which visitors are often directed that they may see representative work.

These particular children were promising-looking young Americans. Is the school starting habits of industry, co-operation, and independence? Is it training in ability to think, to set up worth-while ends, and to employ leisure time well?

Second Observation

First Grade. City Public School.

Twenty-seven pupils present. A more attractive room than in Report 1, less crowded, but furnished in same manner and with only slightly better supply of materials. Same formal organization except that there was some pretense of dividing pupils according to ability into two sections. These were called *A* division and *B* division.

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- 9 - 9.07 *B* division marched to front of room and stood for drill on words and phrases from a chart.
A division at desks entirely unoccupied, but expected to sit perfectly quiet while others recited.
- 9.12- 9.45 Both divisions. General talk regarding weather report, coal production, etc.; very little contribution from children, teacher doing most of the talking. Great waste of time.
- 9.45- 9.50 Formal physical exercises performed in aisles according to teacher's directions.
- 9.50-10.14 *B* division. Reading. Very formal lesson, pupils at desks, called on to read orally one or two lines each in turn. No discussion.
A division. At desks, again entirely unoccupied, but required to be quiet.
- 10.15-10.40 All marched to enclosed court. Pupils stood aimlessly about part of the time. Were led by teacher in rather formal marching, skipping, etc.
- 10.40-10.50 Handwork at desks. Cutting and pasting flowers according to direction. Very little opportunity for exercise of individuality. No purpose apparent. No use indicated for finished product.
- 10.52-11.35 *A* division. Reading from chart.
B division. At desks, entirely unoccupied.
- 11.35-11.40 Formal physical exercises performed in aisles according to teacher's orders.
- 11.42-11.50 Both divisions, seated. Word drill. Teacher erased one word at a time and pupils told what was erased.
- 12 - 12.15 Formal exercises in penmanship, using paper and pencil, at desks.
- 12.20 Dismissed.

No new ideas apparent and nothing to stimulate thinking. When not reciting pupils were expected to sit quietly in seats without anything to do. They were admonished many times during the morning to "sit erect and lock hands."

Small forward steps in several directions are shown in the third observation. The physical conditions are somewhat

better inasmuch as small chairs for "recitation" groups give opportunity for occasional change of position. The chairs also suggest a more intimate intercourse at times. The presence of the miniature grocery store and the nature of the paper construction show a slight recognition of the child's point of view, though the purpose of the activity is not clearly theirs. The drawing offers some opportunity for individual expression, and there is the possibility of improved taste and heightened pleasure in good literature. There is a little genuine, natural conversation, the first we have so far encountered in our visits. Occupation of a restricted kind is provided for the group at their desks, but no provision is made for choice or variety. The rapid workers who finish assigned tasks before the period is over have nothing to do. Very little faith is shown in the ability of children to take responsibility and to select and carry forward worth-while undertakings.

Third Observation

Second Grade. City Public School.

Thirty-five children present. Fixed seats. Small chairs in open space at front of room. Window-boxes with growing plants. A few good pictures on wall. Two sets of good reading texts on teacher's desk. A miniature grocery store in one corner made in part by pupils. The only materials were construction paper, paste, crayons, scissors, and plasticine.

8.30 Children filed in silently, took seats, folded hands on desks.

Rote singing, some of the songs chosen by children. Salute to the flag. Teacher told story of Snow White and Rose Red. Children listened with interest. Teacher asked a few questions concerning story, requiring pupils to rise and respond in complete sentences.

8.45 Sec. I. Reading. All new words in lesson taught by phonetic analysis, before reading. Pupils read orally in turn around class. No questions or remarks by pupils.

Sec. II. At seats, copied words of spelling lesson from black-board. Told to study the lesson but no indication of any special plan for study.

- 9.00 Alternation by sections, of above lessons and exercises.
- 9.15 Sec. I. Drill in arithmetic. Addition combinations. Various devices calling for lively response and some physical activity.
- Sec. II. Did some sums copied from blackboard.
- 9.35 Alternation by sections of above lessons and exercises.
- 9.55 All marched to basement, and then to open court for short free play.
- 10.10 Penmanship lesson. Teacher selected a few of the best sheets, praised them, and pinned them on the wall.
- 10.20 Construction paper and scissors passed by pupils. Teacher dictated instructions for box. Said it might be used in grocery if desired. A little real conversation at this time. Boxes when finished did not seem to be highly valued by pupils. Many were thrown in scrap basket at dismissal time.
- 10.40 Sec. I. Spelling lesson. Chiefly a test, oral and written, of words previously assigned.
- 10.52 Sec. II. Spelling lesson. Same kind, with different words.
- 11.10 Both sections together at seats. Written composition. Talked about Snow White and Rose Red. Teacher wrote children's statements on board. Certain words were emphasized, then erased, pupils told to fill in blanks and copy sentences on papers. Product consisted of brief beginning of the story. When told they might illustrate, pupils got out colored crayons and worked with manifest interest.
- 11.40 Phonic drill, entire class.
- 11.55 Study period. Both sections studied reading lesson. Teacher moved around room and assisted weaker pupils.
- 12.15 Easy sight reading, both sections together, at seats. Accompanied by a little dramatization of story read, rather closely directed by teacher for evident purpose of securing more expressive oral reading.
- 12.35 Dismissed.

When not otherwise indicated, the group under instruction of teacher occupied the chairs at front of room.

The fourth observation was made in a public school, first grade. The life here described presents a pleasing contrast



FIG. 2. SECOND GRADE, LESTER PARK SCHOOL, DULUTH, MINNESOTA

Notice the space and the pleasant social groups, also the evident provision for the many-sided interests of children.

to the barren mechanism found in the first two observations. These little folks are allowed to live and to act like real children. We see them moving about in a normal way engaged whole-heartedly in interesting childlike occupations. They are very evidently learning to direct and control themselves. This is shown by their ability to inhibit loud talking and noisy movements and to carry on numerous delightful and worth-while activities without disturbing the class engaged in reading. Even this brief glimpse shows that they are encouraged to be original, thoughtful, and neighborly, and that habits of industry, courtesy, and independence have a chance to develop.

The equipment is decidedly above the average, but is not more costly than that to be found in many formal classrooms. Several items were evidently contrived by the teacher's ingenuity.

Fourth Observation

First Grade. City Public School.

Twenty-five children present. Two and one half hour class. Room furnished with small tables and chairs, low cabinets containing materials for stimulating handwork; low cabinets to use in keeping unfinished work; large floor blocks for building; low book-shelves containing books for children; two small-type printing-presses, one large-type press for use of the children; easel used for large painting; attractive posters and bulletin board for stimulating reading. Ferns and flowers arranged in low bowls. Low blackboards for use of the children.

8.35—9.05 Pupils entered at 8.35; after greeting the teacher each child went to the cabinet and took out the unfinished work of the previous day or began something new. The teacher went from child to child seeing that each was nicely started, then sat down and three children needing help in reading were helped. After that one child who had been struggling with figures on the board was taught how to make eight correctly. Another child was guided in writing his name on the

blackboard. During this period the children were free to choose any activity they wanted. The following were noted: one child was painting a large elephant to illustrate the rhyme made by the class the day before. This picture and rhyme were one of a series of rhymes being made by the children similar to those in Edward Lear's Alphabet Book. Several girls were sewing tarlatan wings to be used in a dramatization. Several boys were making goblin hats. Other girls were making torches of paper for the dramatization. One boy was printing a rhyme with the press. Another boy was drawing a picture of the goblins and the princess on the blackboard. One little girl read to herself.

- 9.05- 9.35** At 9.05 the teacher played the xylophone and the children became quiet instantly. She asked if they had everything they needed to work with during the period when they would be by themselves while the others were reading. After some deliberation, certain children went to the cabinet and chose more material. Then, without saying anything, the teacher sat down in the front of the room. The children brought their chairs close around her. After a good-morning song she opened the Bible and began to read, "For, lo, the winter is passed, the rain is over and gone," etc. The children said this as she read. This passage was printed and placed over some spring pictures in the back of the room. Two or three children turned instinctively to that place showing that they associated the thought and the printed words. The Lord's prayer followed, then a number of spring songs chosen by the children were sung. Requests for poems to be read were made, and "Fairies and Chimneys" by Rose Fyleman, was read, the children saying parts that they knew. It was a windy day and before school the teacher had posted on the bulletin board the sentence, "This is a windy day." Several children had read it, and a boy suggested that "Kite Weather," a poem in *Jane, Joseph and John*, by Bergengren, be read. After this the children went to their seats. Nothing was said about the work that

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they were to do, as each had determined earlier what he was going to do. They were getting ready for a dramatization of *The Magic Kiss*, by Christine Chaundler, and much of the work naturally centered around that, even though the children were free to choose otherwise if they cared to.

- 9.35-10.05 The teacher wrote, "A, Reading Class," on the board, and that group brought their chairs to the front of the room and formed a small circle around her. Their problem was to read the part of *The Magic Kiss* that answered the question that the teacher held up. Questions had been printed on separate cards by the teacher. Each child had a condensed chapter of the story, which he was to read if it answered the question. As there was a chapter for each question, each child had a chance to read. Comments on the reading were made informally by the children. The teacher kept in a notebook her own comments on their work and needs.
- 10.05-10.30 Other Reading Group -- Reading from First Readers silently — then answering questions printed on the board bearing on what they had read. Every child had read by the end of the period in one group or the other except the three slowest children. They had been given individual help during the period from 8.35-9.00.
- 10.30-10.40 Free activity in the yard — teacher there but simply observing. The slide and swings proved most popular.
- 10.40-10.50 Clearing up the room — putting unfinished work in the lockers. At a signal from the teacher the children were asked if the room presented a satisfactory appearance. They decided that there were untidy floors and the attention was called by a child to the Rules Chart formulated by them early in the year, one of the rules being — "Keep the floor clean!" Cleaning up took some of the time usually devoted to a story so they decided to use the remaining time dramatizing *The Magic Kiss*.
- 10.50-11.15 The teacher sat down and observed. The children pushed back the tables, made the toadstool ring, put

on their costumes if they were finished, brought in the Victrola and got the records for the teacher to use (that was her part). One child told the story -- the music began and the rest of the story was dramatized and interpreted to music. Following the dramatization, comments and suggestions and criticisms of each other were given, and they decided that just as soon as the costumes were finished they could invite the mothers. Following the setting to rights of the room (another class uses the room from 12.50-3.30) they sang a Good-bye song, and were dismissed informally.

The first-grade teachers in this city feel that a period of two and one half hours is too short a time for the children, but since each teacher has two classes of twenty-five each, and sometimes thirty each, it seems to be the best that can be done until new buildings relieve the crowded conditions.

School opens at 8.35, but is not supposed to begin until 8.45; thus it is called a two and one half hour session, but really is two hours and forty minutes in length, for most of the children are there by 8.35.

Compare the next account with the Third Observation. This also is of a public school, second grade. The organization here shown seems to recognize that the school is the children's world during the time they are in it. They take entire charge of some of its affairs and share so far as they are able in others. They contribute some of the subject-matter, set up many of the objectives, and take a good deal of responsibility in the matter of acquiring the facts and skills expected in this grade. Faith is shown in these children. They are treated as seven-year-olds who can reason, plan, and direct themselves effectively, and their responses show that on the whole they fulfill these expectations.

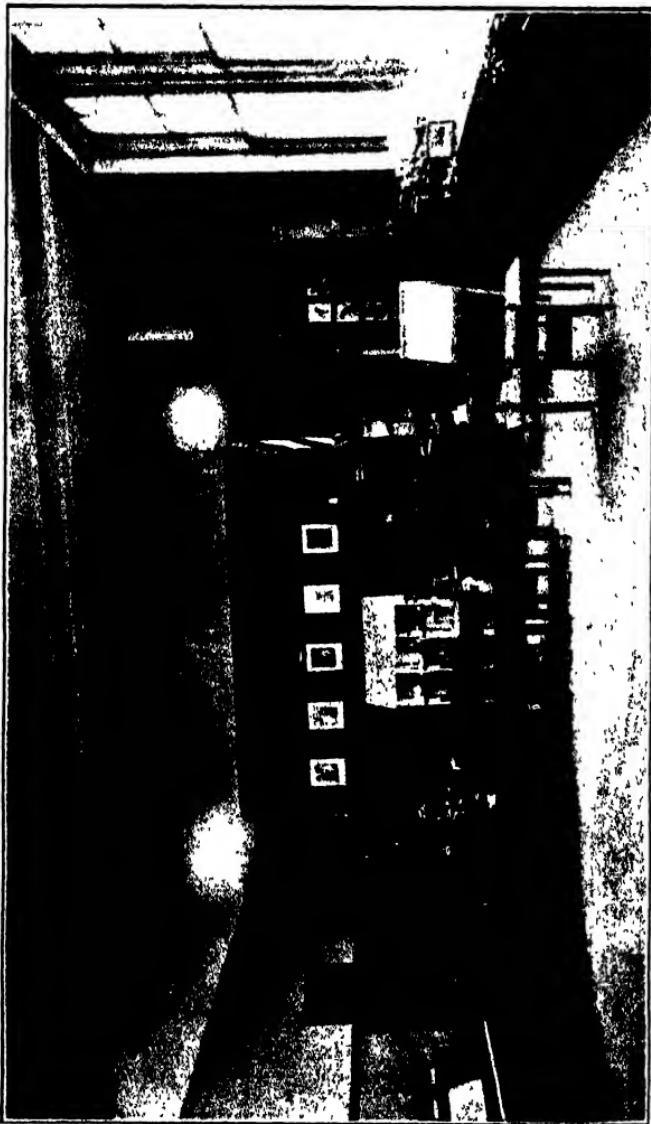


FIG. 3. SECOND GRADE, NOBLE SCHOOL, CLEVELAND HEIGHTS, OHIO

An excellent workroom for children. The low tables and chairs, individual "lockers," workbench, easel for painting, library, piano, Victrola, animal life and plant life, all show a liberal and well-designed plan to meet the nature and needs of children.

Fifth Observation

Second Grade. Public School.

Thirty-five pupils present. Pleasant room, plants in windows. Individual tables and chairs. Large table called "free-work table" containing good assortment of materials for independent work and play such as games, puzzles, books, scissors, crayons, paper, printing outfits, cards for drill. A sand table in one corner, on which a woodland scene in spring is being developed. A playhouse, made out of two packing-boxes, is being renovated and refitted. A bulletin board contains pictures and items of immediate and temporary interest, some of these evidently contributed by the children.

- 8.45- 9.00 Children enter building. Hang wraps in cloak rooms. Enter classroom informally, greet the teacher, put away books and lunch. Some go to free-work table; get books to read, games to play or booklet to work on. Some work on playhouse, others plan features of sand table scene, others use number, phonetic and word cards for self-drill.
- 9.00- 9.10 Opening exercises. A child in charge part of the time. Pupils and teacher choose songs and poems. A sentence prayer is recited. Children tell about plans for the sand table and show articles brought for it.
- 9.10- 9.30 Social studies. Subject, migration of birds, and special value of birds in this locality. Conversation, discussion, pictures, individual reports.
- 9.30-10.15 Reading. Class divided into three groups. *Advanced group* work independently at story to dramatize which they will give to the class. *Second group* work at a lesson in silent reading guided by directions on the blackboard, — questions that will aid in interpretation of the story. One such direction was, "Draw a picture about a part of the story that you would like to explain to the class." *Third group*. With the teacher in a study reading lesson, attention being given to mastery of mechanics. Assignment was for certain definite use of some drill material which was explained. When any individuals not at work with teacher finished the assignment, they went quietly to the work table and chose some material for independent work.

10.15-10.30 Arithmetic. (Group 1.) Directed work by the teacher. For five minutes of the time they drilled themselves in groups with pupil leaders (addition combinations). Teacher observed in order to check habits of work.

10.30-10.45 Recess period on playground. Played games independently, teacher observing.

10.45-11.15 English. (Literature and Composition.) Pupils chose favorite poems to recite. Teacher read part of new poem, Celia Thaxter's "Wild Geese":

"Hark, what a clamor goes winging through the sky!

Look, children! Listen to the sound so wild and high!

Like a peal of broken bells,— kling, clang,
kling,—

Far and high the wild geese cry, 'Spring! It is
spring!'"

They talked about the "pictures" in the poem and asked to have typewritten copies for their poetry books. Decided to try to draw a flock of wild geese later in the day. Planned and formulated certain captions needed for a chart of native birds which they are making.

11.15-11.30 Arithmetic. (Group 2.) Same type as Group 1.

11.30-11.45 Spelling. Test and Study lesson.

11.45-12.00 Writing. Directed lesson, especial attention to individual needs. Practiced writing captions mentioned above.

1.00- 1.10 Music. Songs chosen by children. Class "Choir" sang, led by pupils.

1.10- 1.20 Directed lesson in phonics.

1.20- 2.15 Reading. Each of the three groups worked with the teacher during this time, reading silently and orally. "Audience" reading with two most advanced groups in which they read aloud stories and poems chosen from the class library and especially prepared to entertain others.

When not with the teacher, pupils finished assignment and then had a limited choice of very quiet occupations, chiefly drawing and painting.

- 2.15- 2.30** Recreation period.
- 2.30- 3.00** Period during which all engaged in some project work, the teacher moving about advising, assisting, questioning.
- 3.00** Dismissal, informal. Some pupils remained to put away materials, to tidy up the work table, put the bookshelves in order, and care for plants.

The way a few really social ends give meaning and direction to much of the "regular" school work is well shown in the following report of an observation in a fourth grade. While this is a demonstration school, there is nothing here described which could not be carried out in any school with reasonably good conditions, backed by intelligent conviction on the part of those in charge. The lack of shop and gymnasium might cause two of the children's schemes to be somewhat curtailed. It is a noticeable fact that, while this is a short school day and many fascinating schemes are under way, the formal subjects have a fair share of attention.

Sixth Observation

Fourth Grade. Demonstration School.

Twenty-nine children present. Fixed seats grouped on one side of room. Chairs in front of room for class work. Long, low box-seat for materials and larger pieces of unfinished work. Shelves to preserve and display work. Bookshelves and a library of fifty or sixty excellent books. Workbench and a few essential tools including jig-saws. Wood, clay, paint, textiles, maps, globe, good pictures and casts, growing plants.

Projects in evidence in various stages of completion: a playhouse to be presented to the Day Nursery in the neighborhood; good-sized rag dolls, furniture for the playhouse, and wooden toys; many and various objects in clay drying in the window; five different puppet shows under way with all the appurtenances taking shape; a large pictorial map.

Pupils entered informally as they arrived, hung up wraps, put books away, chatted, and worked individually in a variety of ways.

8.30- 8.45 Chapel. Grades I to VI.

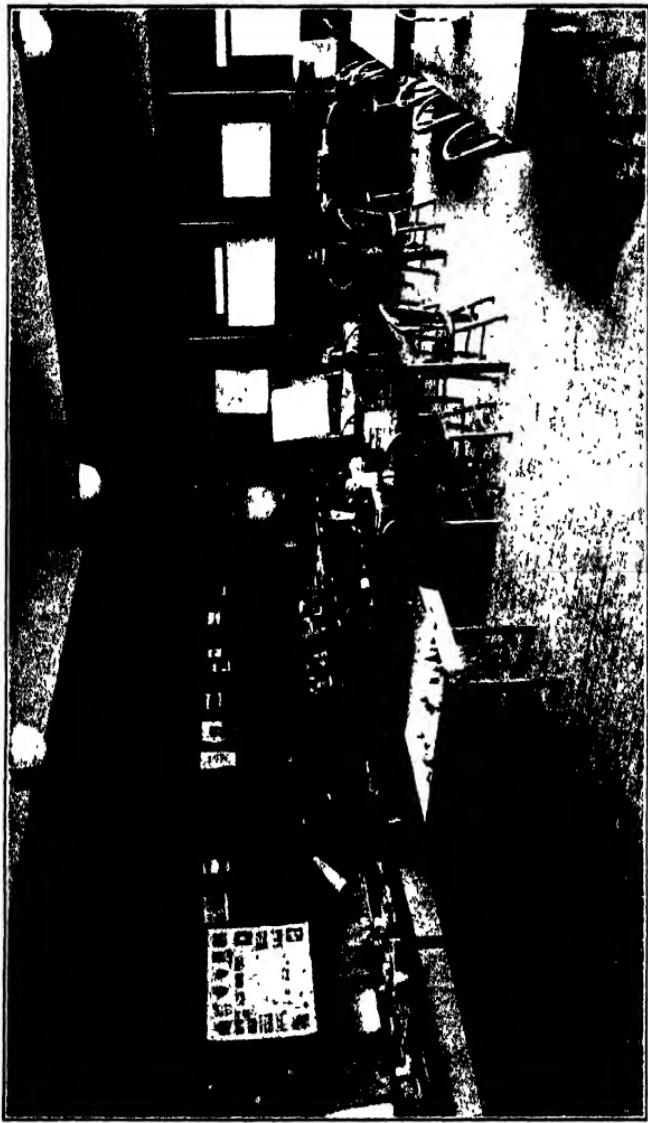


FIG. 4. THIRD GRADE, FAIRFAX SCHOOL, CLEVELAND HEIGHTS, OHIO

This is very different from the conventional schoolroom. Evidently a more natural social organization prevails. Tables and chairs arranged for small groups, individual cabinets for work, low book shelves and sand table indicate this. An exhibit connected with the study of Japanese life and prepared by the children is seen at the left.

8.45- 9.10 Returned to room and took seats. Teacher said, "What shall we take up first?" This class had recently made themselves responsible for planning and launching a May Party or simple May festival. On the blackboard was a list of the things needing to be done as the initial steps. Pupils had planned and recorded these as follows:

1. Prepare speeches making proposals to other classes.
2. Practice speeches. Select five of the best.
3. Costume Committee collect materials.
4. Measure materials.
5. Practice dances.
6. Write captions for notices.

Class consulted this list and decided to practice speeches prepared the day before. These speeches were intended to inform lower grades about the proposed May Party and to ask them to take part in some special way. There were several "try-outs" followed by friendly criticism from classmates and teacher. Suggestions were offered showing how a speech intended for kindergarten children should differ from one for Third Grade, for example.

It had been discovered that the stock of cambric, cheesecloth, etc., for entire school was getting low. A committee now went out to collect from primary class rooms all available materials for costumes. The committee was to list colors, measure, and report amount of each.

9.10- 9.35 Meeting of Book Club, composed of seventeen of the best readers, with a chairman. Business, taking in two new members. Evidence of their qualifications consisted of reports on books read. These were collected and filed. Eight children read aloud from five different books. Three of these children are planning their reading together from *Robin Hood*. During this time the other twelve children studied reading at seats, all using the same text.

9.35-10.00 The latter class read under direction of teacher. Training in silent reading with special attention to individual needs.

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10.00-10.30 Arithmetic. Measured patterns of bear costumes and flower costumes and estimated total amount of cloth needed. Rest of time, Courtis practice sheets for Multiplication and Division. In this, pupils compared results with their own past achievements.

10.30-10.45 Recess. Outdoor play.

10.45-11.30 Special project work. Five boys went to the Manual Arts room. Worked on furniture for playhouse. Two boys made wall-paper for playhouse. Seven girls worked on rag dolls and dresses for Day Nursery. Three boys and one girl worked on puppet shows. Two girls and one boy drilled themselves in spelling for fifteen minutes. One boy and one girl read chosen books about twenty minutes. The committee on measuring went to other rooms, brought back cloth and measured it. Two boys and one girl went out in hall and practiced their speeches.

The science teacher came in during the latter part of period and helped two boys arrange small electric lights for puppet shows. While this was going on all pupils took seats and watched in order to get the benefit of the demonstration.

All pupils filled out cards recording briefly what they had done during this period of forty-five minutes and filed their cards in a case kept for that purpose. Five minutes allowed to get work put away.

11.30-11.50 Gymnasium. Part of time given to Bear Dance and Crane Dance for May Party. Fruitful suggestions from children regarding the dances as they were not "ready-made."

11.50-12.15 Written English and spelling. Captions for large announcement cards were formulated. Necessary words studied. Part of time given to drill and test on words assigned the day before from text.

12.15-12.30 Exercises in penmanship. Time test. Individuals compared results with their last papers. Attempt at self-rating, Thorndike Scale.

12.30- 1.00 Geography. Map study and discussion of specific questions about kinds of cotton, where grown, where manufactured. Reports given by individual children who had made themselves responsible for certain

features. Plans made for further work on large pictorial map under construction by class, intended to tell the story of cotton, so far as geography of the United States is concerned.

Note: Geography alternates with History and Civics. The entire period, 10.45-11.30, is not used every day for "special project work." A redistribution of time provides for directed Music and Fine Arts on certain days. The period, 8.45-9.10 is used at times for written work.

What chance have the native instincts and capacities of children to play their part in the educative process under such a regimen as prevails in the first two schools described? Not only is there nothing to stimulate and direct curiosity, exploration, manipulation, construction, language, and social interchange, but all of these highly valuable reactions are definitely and effectively excluded or repressed. The third example is only slightly more generous toward the active impulses of children, and only slightly more attentive to the enrichment of life and the formation of good habits. In none of these is there any provision for children's purposes, or any suggestion that what they are doing in school bears the least relation to their home and neighborhood life. Is it not a poor day's work for child or man which consists of such minute and isolated products that no immediate purposes and plans of any scope can possibly arise? Even for an adult is it not labor on a low plane which leaves nothing at office, shop, or laboratory when the day is done to cause him to turn back to the unfinished work with some zest and anticipation? The small child who leaves nothing at school when the day closes but some poor little scraps of written work and a primer or reader with a marker to show the place, has been deprived of the very root of earnest work; some scheme or plan (individual or collective) which has enlisted his effort to-day and which he will take up again with eagerness and zeal to-morrow.

Evidence gathered in the Primary Council investigation and also in an investigation regarding the amount of oral English in primary grades¹ goes to show that common practice in many large city systems strongly resembles that in the first and second observations described above. In certain sections of the country, at least, general practice seldom reaches a plane very superior to that described in the third report. This judgment is further confirmed by the examination of daily programs for primary grades furnished the author in 1923-24 by about two hundred students at Teachers College from all parts of the country.

There are several large cities and numerous smaller places, where under superior leadership the best features reported in the last three observations have been rather generally incorporated. There are, of course, hundreds of single classrooms and many individual public schools where this kind of work is well established.

Which of these examples are the primary schools of your town or city most like? If the types here shown seem too few and not to offer enough shades of practice, examine the larger number in the Primary Council report referred to above and ask yourself the same question.

With no evidence but that of the bare program or time-table for a classroom, one can tell a good deal about the nature of the life which goes on there. Compare the following examples taken from a large collection which came straight from our public schools in 1923. For convenient reference, these programs are designated as *U, V, W, X, Y, Z*.

FIRST GRADE. *U.*

9.00- 9.15 Opening exercises and hygiene.

9.15- 9.30 Penmanship exercises.

¹ Moore, Annie E.: "A Quantitative Study of Oral English in Primary Grades," *Teachers College Record*, May, 1919.

- 9.30– 9.33 Breathing exercises.
 9.33– 9.45 Phonics.
 9.45–10.00 Phonics and spelling.
 10.00–10.05 Civics.
 10.05–10.25 Recess.
 10.25–10.30 Literature.
 10.30–10.35 Oral language.
 10.35–10.55 Word drill.
 10.55–11.15 { Reading, third class.
 { Reading, second class.
 11.15–11.30 Reading, first class.

Noon Recess

- 1.15– 1.30 Music.
 1.30– 1.35 Study spelling.
 1.35– 2.05 { Reading in three divisions.
 { Ten minutes for each.
 2.05– 2.15 Games.
 2.15– 2.40 { Reading — two days in week.
 { Drawing — three days in week.

FIRST GRADE. V.

Morning Session

- | | |
|--------------------------------|--------------------|
| 9.00– 9.20 Opening exercises. | |
| 9.20– 9.40 B — Reading. | A — Busy-work. |
| 9.40–10.00 A — Reading. | B — Busy-work. |
| 10.00–10.10 Recess. | |
| 10.10–10.30 B — Numbers. | A — Word-building. |
| 10.30–10.45 A — Numbers. | B — Word-building. |
| 10.45–11.00 Physical training. | . |
| 11.00–11.20 B — Phonics. | A — Busy-work. |
| 11.20–11.40 A — Phonics. | B — Busy-work. |
| 11.40–11.45 Dismissal. | |

Afternoon Session

- 1.00– 1.10 Singing.
 1.10– 1.30 Penmanship.

- 1.30- 1.40 Physical training.
 1.40- 2.00 B - Reading. A — Busy-work.
 2.00- 2.10 Recess.
 2.10- 2.30 A - Reading. B — Busy-work.
 2.30- 2.50 Music.
 2.50- 3.15 Drawing, language (alt.).
 Dismissal.

FIRST GRADE. W.

A.M.

- 9.00- 9.15 Bible story and singing.
 9.15- 9.30 Phonetic drill by flash cards, chart, etc.
 9.30- 9.45 Writing.
 9.45- 9.47 Physical exercises.
 9.47- 10.00 C - Reading. A and B - Silent reading, written numbers.
 10.00-10.10 B - Reading. A and C — Silent reading, written numbers.
 10.10-10.15 Basement period.
 10.15-10.25 A - Reading. B and C — Silent reading, written numbers.
 10.25 10.30 Milk distribution.
 10.30-10.45 Recess.
 10.45-11.05 Oral drill and written numbers.
 11.05-11.07 Physical exercises.
 11.07-11.25 Nature study or physiology.
 11.25-11.30 Preparation for dismissal.
 11.30 Dismissal.

P.M.

- 1.15- 1.20 Opening.
 1.20- 1.35 A — Reading and phonics.
 B and C — Silent reading, written spelling.
 1.35- 1.50 B — Reading and phonics.
 A and C — Silent reading, written spelling.
 1.50- 1.52 Physical exercises.
 1.52- 2.10 C — Reading and phonics.
 A and B — Silent reading, written spelling.
 2.10- 2.15 Basement period.
 2.15- 2.30 Spelling.
 2.30- 2.45 Recess.
 2.45- 3.05 Language and story-telling.

- 3.05– 3.07** Physical exercises.
3.07– 3.25 Drawing or music.
3.25– 3.30 Preparation for dismissal.
3.30– Dismissal.

FIRST GRADE. X.

- 9.00– 9.40** Free period. Chosen activities.
9.40–10.00 Check-up of work in free period.
10.00–10.15 Recess.
10.15–10.30 Group assembly. Language.
10.30–10.50 { Reading — sometimes in two groups or more. Children as leaders part of the time. If more than two groups, all work on reading; if two groups, one
10.50–11.10 { reads while other engages in seat work.
11.10–11.30 Music.
1.20– 1.45 Practical arts (Industrial arts).
1.45– 2.00 Group assembly.
2.00– 2.15 Recess.
2.15– 2.45 { Reading. (Note under A.M.)
2.45– 3.00 {
3.00– 3.10 Story — Music.

FIRST GRADE. Y.

- 8.45– 9.30** Free period. For individual problems and projects. Care of pets, plants, etc.
9.30–10.15 Language. Writing. Discussion of morning work and plans for next day. Incidental reading in this connection.
10.15–10.30 Recess. Milk.
 Play period, outdoors or in gymnasium.
10.30–11.30 Reading, phonics, word drill, games. Distributed according to needs of different groups.
1.00– 1.45 Reading, two groups. Alternate groups go to gymnasium.
1.45– 2.00 Recess.
2.00– 2.30 Singing. Story hour.

FIRST GRADE. Z.

- 8.30– 9.00** Self-directed play and projects launched. Music, victrola, singing or band.

9.00- 9.30	Groups directed to units of play and study.	
9.30- 9.45	Individual and silent reading passing over into reading seat games.	Number games and manual arts projects.
9.45-10.00		Individual and silent reading passing over into reading seat games.
10.00-10.15	Number games or manual arts.	Individual and silent reading.
10.15-10.35	Recess for all.	
10.35-10.50	Classes organized according to specific needs of different groups for the purpose of giving instruction in technique and reading habits.	
10.50-11.30	Language, story, or dramatization. Often excursions.	
11.30-11.50	Writing at wall charts or blackboards.	
11.50-12.20	Plays or drawing depending upon the interests of the day.	

The shortness of the periods and the large number of periods in a day are striking features of the programs designated as *U*, *V*, and *W*. These characteristics become still more noticeable when we analyze the programs.

U, with twenty periods, has only three that exceed fifteen minutes, the median length of the time divisions being about ten minutes.

V, with a five-hour day and seventeen periods, manages to get ten periods of twenty minutes each.

W has a day of four hours and forty-five minutes divided into twenty-six periods. Ten of these are from two to five minutes long. No exercise lasts more than twenty minutes.

These facts are shown in the form of graphs in Fig. 5.

In these three rooms it is clear that the children move rapidly from one kind of drill, exercise, or recitation to another throughout the day, with no time and no opportunity

to relax and throw themselves into some absorbing occupation.

At their seats these young children are supposed to be engaged in silent reading, written numbers, written spelling, "busy-work," and word-building until called for another direct lesson. It is clear that there are no interesting childlike activities provided which are meant to continue from day to day and to gather momentum as they develop. In these three programs a fair amount of drawing and music, a little story-telling, ten minutes for games (in one case), and the uncertain "physical training" in another, comprise all one can find of provision for the active and expressive side of child nature. If the reading should happen to be

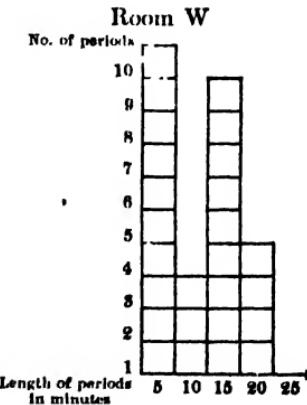
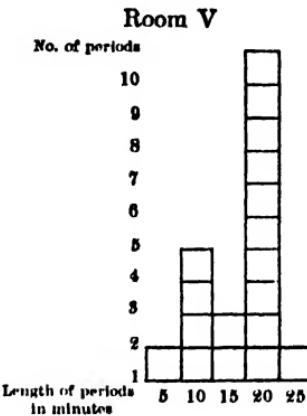
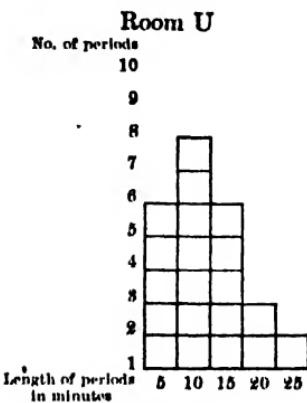


FIG. 5. GRAPHS, SHOWING TIME DISTRIBUTION IN DAILY PROGRAMS

The room designated as *U* has a daily program divided into 20 periods. Each square represents a separate period. Five of these are five minutes or less in length, seven are ten minutes in length, five are fifteen minutes, etc. *V* and *W* represent schedules of other rooms to be interpreted in like man-

taught in a mechanical and formal way, then the life is barren indeed.

The responses most likely to be developed in these rooms are instant obedience to signal, patient, unintelligent plodding through unrelated exercises, and (in many children) the art of concealing utter idleness. There is apparently little opportunity to learn how to concentrate on matters of real importance and to push forward industriously to a conclusion.

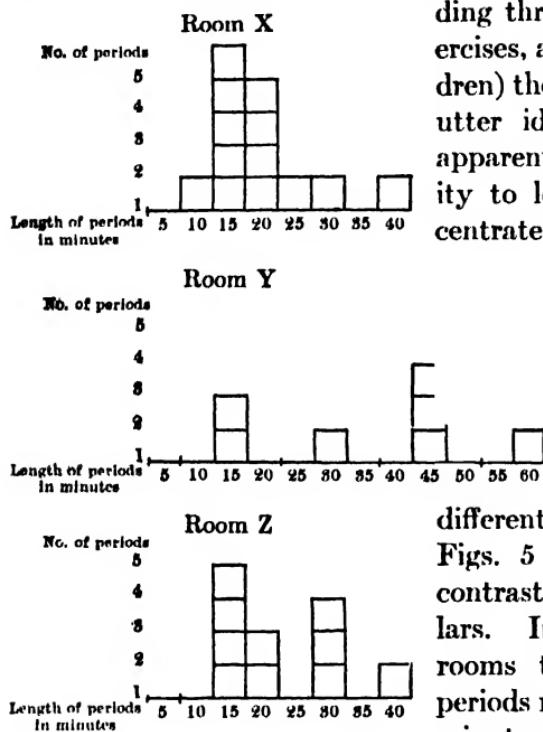


FIG. 6. GRAPHS, SHOWING BETTER TYPES OF TIME DISTRIBUTION

The room designated as *Y* has a daily program divided into seven periods. Each square represents a separate period. There are no periods of five or ten minutes. There are two periods of fifteen minutes each, one of thirty minutes, three of forty-five minutes, and one of sixty minutes. *X* and *Z* represent schedules of other rooms to be interpreted in like manner.

terms as *free period*, *chosen activities*, *self-directed play* and *projects*. Time is allowed in which to check up and criticize

The programs designated as *X*, *Y*, and *Z* are quite different. The graphs in Figs. 5 and 6 show the contrast in some particulars. In each of these rooms there are several periods ranging from thirty minutes to an hour in length. There is an entire absence of rapid skipping through a succession of five- and ten-minute periods. The day begins with a long period the nature of which is denoted by such

work, to set standards, and to consider the next steps. Practical arts, industrial arts, dramatization, play, and study are given a place, and in these activities pupils find worth-while employment while the teacher is busy with different groups. The expressive arts, language, music, story, dramatization, drawing, and writing (not penmanship exercises), are liberally provided for. These last three programs, especially Y and Z, show a relatedness and interplay of parts entirely lacking in the first three examples.

✓ (One of the first steps in modifying the severe mechanism of the conventional program is to provide at least one long period of from thirty to fifty minutes a day in which the children may engage with some degree of real freedom in a variety of worth-while activities. This necessitates, of course, a reasonable supply of materials, though a costly outfit is not necessary. If the children are encouraged to engage in constructive work, dramatic play, representative play, self-drill, educative games, housekeeping activities, etc., there will be launched many things which will carry over and affect advantageously the rest of the curriculum.)

✗ The next step is to take the reading out of the narrow confines of numerous ten- and fifteen-minute periods, and get a longer stretch of time when the several groups will all be engaged in reading or activities related to reading. The teacher gives attention to different individuals and groups for the particular work needed, and the others continue with games, puzzles, printing outfits, blackboard writing, or whatever has been chosen or assigned.

This plan gives at least two long periods in the day when the children are engaged in significant and relatively unified activities. They will have a good deal of physical freedom in the period first described and will be somewhat more restricted in the second.

When these two lines are successfully developed, it will be

seen that much of the other work can be conducted in the same way and that the old program of twenty to twenty-five short, disjointed divisions is both unpsychological and inefficient.

QUESTIONS

1. Pick out a type of practice here presented, or features from several types, which approximate your own ideal. Give reasons for your selection.
2. What features do you consider most objectionable? Why?
3. What merit do you see in having at least one long period in the day when children may have a fair degree of choice in occupation? What weak points may develop in such a scheme? How may these defects be obviated?
4. From a study of these reports discover how some teachers have avoided having a large number of very short periods.
5. Name some features that will enter into a day's work if it is on a fairly high level, in the case of either child or adult.

CHAPTER III

WHAT IS THE PLACE OF THE KINDERGARTEN IN THE PRIMARY SCHOOL

EVER since the kindergarten was introduced into the public schools there has been a persistent inquiry regarding its place and use in the total scheme of education. The kindergarten is not a part of our compulsory education system and it has made its way very gradually into our schools. For this reason its sponsors have rarely been required to state its aims and objectives simply and definitely in terms similar to those governing the elementary school.

The more rapid development of the kindergarten in recent years, a wider general interest in matters of education, and the pressure of school finance have given greater prominence of late to the question under discussion. Frequently the demand is still more pointed, and the inquirer asks, "Does the kindergarten prepare for first grade?" "What do the children learn in kindergarten?" The more advanced stages of education are always inclined to judge a lower stage by its specific contribution to the work of the higher department. Naturally the kindergarten has resisted the viewpoint that its value to the child lies chiefly in preparation for first grade.

It must be admitted that the earlier attempts of kindergartners to elucidate their aims and state results were not very successful. It has taken a long time to counteract the influence of a vaguely conceived abstract theory and to develop a scheme of education for early childhood based squarely on a platform of modern psychology, social science, and hygiene. Less and less frequently, however, as the

modern movement grows, do we hear that the kindergarten brings about "the all-around development of the child," that it results in "the harmonious unfolding of his powers." Such blanket statements once sounded well, but they really told nothing. To-day, kindergarten teachers are just as willing and competent as any other group to discuss the results of their work in terms of specific changes which they are trying to bring about in their pupils.

Wherever kindergartens exist, it is necessary that the question raised in this chapter be answered satisfactorily. When a growing organism is concerned, one year of development and training cannot be cut off from subsequent periods with no attempt at an estimate of healthy growth. People directing the education of six-year-old children must look back on the five-year-old period and try to learn what was attempted and what was accomplished.

Perhaps the main inquiry can best be satisfied through a consideration of a few separate phases.

REAL UNITY OF KINDERGARTEN-PRIMARY IS NOT SECURED THROUGH SUPERFICIAL FEATURES

The earlier attempts at establishing a better relationship between the two departments were ineffectual because they did not go to the root of the difficulty, but dealt with the more superficial points of difference. There were efforts to borrow from the kindergarten minor attractive features to brighten the primary work, to make it more playful. Useless paper-folding, paper mat-weaving, stick-laying, and more intricate building constructions were proposed as suitable for the first grade mainly because they were too difficult for the kindergarten. Many primary teachers, eager for some material for their pupils, tried to introduce such work, only to meet with failure. These occupations were lacking in purpose and in educational worth. They

were retained in kindergarten for so long a time because the conservative teacher was a stanch believer in the theory back of them. She sat firmly in the midst of a relatively small group of children and, by dint of much gentle insistence, by personal magnetism, and sometimes by cajolery, got them to submit to imposed and unchildlike objectives. Such exercises, when transferred to the primary room, with its large class and busy teacher, met with almost instant failure. The common sense of teachers and children revolted at the utter emptiness of the work, and it was observed that the tangible results were often poorer in quality than similar work done by kindergarten children. The stronger primary teachers rejected such material, and the less clear-sighted were disappointed and baffled at their inability to make use of "kindergarten ideas" in their own work. The conservative kindergarten teacher looked on and was distressed at the mishandling of her revered materials and at the apparent slipping backward of her pupils of the year before. The sad thing is that such materials, already doomed to banishment from the progressive kindergarten, still find place on many primary shelves, and such exercises are sometimes pointed out to-day as evidence that "our first grade is almost like a kindergarten."

At various times and places there have been attempts to saddle on the kindergarten part of the burden of the early work with symbols. Goaded by the oft-repeated criticism that they can point to no really tangible results from a year's work, pressed by citizens, superintendent, school board, to give satisfactory account of themselves, kindergarten teachers have in some places accepted a definite allotment of work in reading and number. There is little to justify such an arrangement. The short school day, the immature minds of the children, and the meager basis they possess for the meanings of symbols make this a wasteful proceeding

except for a small group of the most precocious or mature pupils. To do the amount of work necessary to secure measurable and permanent results in reading with masses of five-year-olds will force the kindergarten teacher to neglect much more important things. If the teaching of reading is skillfully handled from the first grade on, are not the six or eight years of the elementary school ample to give all the training in this art which the various individual capacities of the children can appropriate?

The very large percentage of failures in the first grade (about twenty-five per cent) shows that a whole year after the pupils have left the kindergarten large numbers of them are still not ready to meet the formal requirements commonly exacted in the first grade. Why push this work in symbols down upon still less mature minds unless we wish to increase the number of failures and start off a still larger percentage of our school population with the sense of discouragement and defeat. For most of those failing in the first grade would have been more complete failures had they been forced to attempt to learn to read while in the kindergarten.

DOES THE KINDERGARTEN PREPARE FOR FIRST GRADE?

Too often discussion of this question shows that the inquirers have in mind, not the larger issues at stake in the early stages of education, not the establishment of valuable personal and social habits, not even the accumulation of a considerable amount of useful information; what they really wish to know is whether the kindergarten holds itself responsible for starting the children in formal school work. It is often strongly implied also that the kindergarten fails of its duty if it does not build up just the kind of habits and responses called for in a particular type of first grade, be the latter right or wrong as measured by modern standards of education.

Pupils from a kindergarten so conducted that they must sit and wait for every move to be directed by the teacher, even to the manner and moment of removing the lids of boxes of blocks, whose every action when not so dictated is initiated and controlled by the piano, will certainly be misfits in a primary room, where self-reliance and other good work habits are called for, and where it is expected that conduct shall be guided by thought processes rather than by rhythmic automatisms. Conversely, children promoted from a kindergarten where they have had much freedom of the right sort, where initiative and rational social behavior have been encouraged, and where individuality has had reasonable consideration, will be unhappy and sometimes difficult citizens if they happen to come under a radically different social order of the lock-step, drill-master type in the primary grades. It must be bad for the nervous organism and the mental and moral life of children to be subjected to such sudden and irrational alternations of policy and method.

Although a categorical answer cannot be given to our question, it can be shown that a good modern kindergarten does prepare in specific and recognizable ways for any first grade that is moderately progressive.

LINGUISTIC TRAINING

In localities where there is a large foreign population the kindergarten almost pays for itself in the excellent language training which children get. Conditions are the very best for this work. Pupils are in the stage where linguistic accomplishment is easy and rapid, and the kindergarten organization and régime is such that the strongest stimuli to natural idiomatic speech are offered in abundance. The superior opportunity furnished is further discussed in Chapter I. Children from all but the most favored homes need the language training they receive in kindergarten.

Although kindergartens in general should not be expected to launch the formal work in the mechanics of reading, they can and do in a very real sense lay the foundation for the art. Here again the training in language is of immeasurable importance. If reading is to deal with meanings, it is obvious that the child who has a working vocabulary of two thousand words is much better prepared for intelligent reading than one who commands only three hundred words; and if he pronounces these words clearly and correctly, he is in a better state to understand and appropriate the later work in phonics. Indeed, phonetic training of the most essential kind is an important feature of the kindergarten year. It is directed toward clear enunciation, pleasing tone quality, and a true ear for shades of sound, rather than to the analysis of words and word-building required in some methods of beginning reading. The kindergarten encourages a great deal of vocal play which appeals to an instinctive interest and furnishes an excellent aid in getting control over speech organs.

LAYING A FOUNDATION FOR READING

The contents of children's minds influence greatly the facility with which they take up reading and the intelligence with which they pursue it. Familiarity and interest are very important factors in the reading process. The eye-movement even in a skilled reader varies with the character of the reading matter which he encounters. That which is familiar in thought and idiomatic in structure, dealing with ideas which are easily apprehended, is read rapidly and surely, whereas material which is unfamiliar in either language or content is read more slowly and with more retracing of words and phrases. Whatever, then, furnishes the children's minds with clear images of the world of realities, with vivid concept and correct ideas to be called up by

the spoken and printed word, will be of the utmost value in mastering the reading process. Huey¹ says we read by cues and by clues, and offers scientific evidence that the act of reading is accomplished partly by suggestion and inference, familiarity "enabling any part that may be clear to help into consciousness other parts that are indistinct."

Children who know little or nothing about animals and birds and bees, trees and flowers and gardens, parks, markets, railroads and steamboats, games, play, toys, or anything outside their own narrow environment, bring little to the printed page that will help in its interpretation. They cannot judge very well whether what they are attempting to read makes sense or not, since they are ignorant regarding so many of the experiences dealt with in children's books. A multitude of meanings and associations must be built up while such beginners are struggling with the early steps in reading instead of being already established and therefore prompt to spring to consciousness through the new medium of writing and printing.

The kindergarten has always attached great importance to first-hand experience, and most teachers go to great trouble to secure for their pupils the direct contacts and impressions which will enrich their minds and clarify their ideas. Excursions are frequently taken to such places as parks, museums, markets, milk stations, craftsman workshops, greenhouses, the water-front, post-office, and engine-house. Other means are employed, such as bringing to the kindergarten for a longer or shorter time pets and other animals, plants, flowers, and various, natural and manufactured objects of significance. A rich play life is provided, and the children reproduce dramatically some of the experiences they have had, organize them into representative action, and thus further deepen and clarify the ideas gained.

¹ Huey, E. B.: *Psychology and Pedagogy of Reading*, chap. III.



FIG. 7. GROUP OF THREE- AND FOUR-YEAR-OLDS, HORACE MANN
KINDERGARTEN, TEACHERS COLLEGE

A "show" was proposed by one boy, who then got others to assist in laying out the "room" with blocks. The entertainment consisted of showing pictures and telling stories. The audience is evidently interested in this number on the improvised program.

It is often claimed that children get all this in their home and family life, and of course this may be true as regards certain individuals. But such studies as G. Stanley Hall's *Content of Children's Minds*, and the testimony of hundreds of teachers in the lower grades, bear witness to the pathetic meagerness and ludicrous distortion of the mental furnishing of a great many of the younger children. Although passing out of the period of infancy, the world is still something of a "booming buzzing confusion," to use William James's expression, and the nebulous state of their minds interferes with our overzealous efforts to turn them toward symbols and abstractions.

There is much opposition to the strenuous crowding of the three R's in first-grade work, but if this must still be done let us at least provide a year in the kindergarten for all children, so that they shall be assured a full life of play and vital experience, and then let us continue a fair measure of similar activities all through the primary years.

The delightful introduction to literature which a good kindergarten gives is of the utmost value to beginners in reading. It is the exceptional child who possesses a great many of the choicest books and pictures suited to his years, and only the most favored home conditions make possible an early acquaintance with the best in literature for the child world. Many mothers are totally unprepared to provide the material for such delight and instruction, and others are so busy with the multitudinous cares attendant upon the physical needs of the family that scant time is left for the story-hour.

Kindergarten pupils become acquainted with the charming and whimsical characters in Mother Goose. Many of the rhymes are readily learned "by heart." A marvelous procession of animals, birds, and human beings marches through this wonderful old book, and many great artists have thought it worthy of their best efforts to depict the fascinating scenes suggested by the rhymes. In like manner delightful old folk and fairy tales, the most suitable modern verse, and the choicest realistic stories are presented, and by the time the children are ready to encounter some of this material in primer and first reader they are possessed of a background which will make them more intelligent and appreciative readers. They will carry to their books clearer ideas, a better basis for association of symbols with meanings, a quickened sense of humor, a better notion of plot and sequence, and will experience fewer obstacles when they attempt to master the complex art of interpreting the printed page.

NUMBER EXPERIENCE

The demand that the kindergarten shall definitely lay a foundation for primary arithmetic is less insistent than formerly because in many places the direct teaching of

number is no longer begun in the first grade, but is postponed to the second year. It is obviously illogical to exact of the kindergarten what has been eliminated from the next grade. By the time pupils reach the second grade, no one knows where they have "picked up" the information along arithmetical lines which they possess — whether in the kindergarten, the first grade, at home, or in the street. There is no doubt that much teaching of number, conscious and unconscious, goes on in the kindergarten; since, wherever human beings are actively and thoughtfully engaged with materials and things, number experience is an inevitable part of the activity. So far as actual personal need and genuine opportunity are concerned the kindergarten children are in a much better situation to get effective lessons in number than are pupils in a primary class patterned along formal, conventional lines. Kindergarten children employ an abundance and variety of material in purposeful ways estimating, selecting, shaping, and adapting it to their needs; hence quantitative experience is ever present. Often it rises prominently to the surface and pupils become keenly conscious of certain facts and relationships. There is at this stage an instinctive tendency to count which satisfies itself in enumerating children, blocks, beads, places at table, chairs, plates, and whatever comes to hand. There are many occasions where counting and estimating are really necessary and teachers bring these needs to the consciousness of the children. The conception of arithmetic teaching developed in Chapter XIV is admirably realized in many kindergartens where, through the genuine uses of the day, abundant number experiences appropriate to the kindergarten period are obtained. Formal drill at this stage is neither necessary nor desirable. Perhaps the most important contribution which the kindergarten and first grade can make in beginning arithmetic is the

development of some of the most fundamental number concepts, such as *more, less, as much as, long, longer, add to, take from, equal*. The unfamiliar language involved in mathematics has been found to be a serious handicap to beginners, and it can be easily and naturally acquired only in concrete use.

Just as children learn to make use of pencil, brush, needle, hammer, and loom, so they learn to employ number as a tool in their own interesting daily life. They help to make small purchases for individual and class use, contribute pennies to special objects, sell their handcraft products for benefit funds, learn how to pay car fare, and thus get a working knowledge of low-value coins and their relation. Penny savings-banks are encouraged, and children are taught to save part of their pennies and to spend in more worth-while ways what has heretofore gone for chewing-gum, cheap candy and cakes, and flimsy, catch-penny trinkets. It is possible in this period to start sound though rudimentary ideas of thrift. A definite number of pennies and nickels converted into milk enough to save a starving baby for a week, another sum transformed into a beautiful big new ball for the kindergarten, another personal collection invested in a coveted humming top or bright picture book — such experiences, constantly occurring and brought to consciousness, constitute as definite training in arithmetic as does learning to add two and two.

Strict Froebelians of the old school attempted to impart the rudiments of mathematics through teaching fractional parts of the cube; the number of faces, edges, corners of the cube; square inches in a surface laid with parquetry squares; multiples of three, four, etc., appearing in symmetrical figures. They felt also that it was of high importance that young children should know by name many geometrical forms both solid and surface, and how they are derived one

from another. There was nothing really functional about any of this work, since what the children did with their materials was for no purpose of their own either in play or practical life. A good part of the mathematical facts which the children got thus had no application whatever in later primary work, and in some directions went far beyond the requirements of an exacting course in first- and second-grade arithmetic.

MINIMAL ESSENTIALS

For some years there has been much agitation regarding the question of evolving some statement of a minimum in achievement to be expected of the kindergarten. If by "minimal essentials" is meant the status necessary for promotion to first grade, it is obvious that such a scheme is impractical so long as kindergartens are not provided for all children and attendance is not compulsory in those which do exist. Consider a hypothetical case. Charles Smith attends kindergarten for a year and in June is nearly six years old, but in achievement is so far below the standard set that he is not recommended for promotion. Instead, he is expected to return to the kindergarten for another term. Mary Jones, who lives next door to the Smiths, does not attend kindergarten at all, but in September, being of proper age, is presented for admission to the first grade. We will suppose that she is in no respect superior to the other child, but she is accepted without question, since she does not show herself to be distinctly subnormal in intelligence. She is not subjected to any of the standards which would debar her playmate, although she would have failed had there been the same "entrance requirements" for children coming directly from the home. From the standpoint of Mr. and Mrs. Smith, their boy is penalized for attending kindergarten, and of course they will not submit to this.

Few people take the position that attendance at kindergarten should be made compulsory for all children. That being the case, chronological age, together with a reasonable use of intelligence tests, will probably continue for some time to be the basis for promotion from the kindergarten as well as for entrance to the first grade from the home.

If, however, by "minimal essentials" is meant a statement of reasonable achievement to be expected of kindergarten pupils, and if pupils attaining such standards may upon promotion be treated differently from children who have never attended kindergarten, then there is some object in working out such a scheme. In any school large enough to have several first grades, pupils promoted from the kindergarten on the basis of demonstrated ability should be kept for at least one term in a separate class. They should be given an opportunity to show in what respects they differ from non-kindergarten children and from those sent on merely because their chronological age determined promotion. Such an arrangement would spur kindergarten supervisors and teachers to make clearer and more specific statements of their course of study and standards for promotion, and would cause them to be much more careful to check up and record tangible results of the year's work. So long as the best-trained kindergarten pupils are classified exactly as if they had never attended school and so long as the curriculum and methods of our first grades are planned exclusively for veritable beginners, it seems both unfair and futile to insist that kindergarten workers shall hold themselves responsible for specific, demonstrable achievement of pupils. On the other hand, so long as kindergartners are content to go along making no definite statement of objectives and results and no protest against the leveling process which reduces an apt pupil after a year of regular attendance to exactly the same status as an un-

trained child from street and home, they have small ground for complaint against the prevailing custom.

THE SERVICE OF THE KINDERGARTEN IN CLASSIFICATION OF PUPILS

There is strong evidence that the kindergarten will in the near future be recognized as having one great function, that of a "recruiting station" for our schools. Dr. Gesell¹ uses this term in his very interesting treatment of the question of school entrance. He shows how great a service might be rendered by the kindergarten if it could become the main agent through which all other child-welfare agencies of a neighborhood might operate. He says:

The whole problem of the function of the kindergarten comes to a crux when we inquire, What should be the relation of the kindergarten to school entrance? If the kindergarten has no vital business in this field, it may be questioned whether it should be part of our public school system at all.

No feature of public school administration is apparently under less control than that of school entrance. . . . We annually recruit three millions of school children into our great educational camp without meeting the hygienic responsibilities and opportunities involved.

And what is the relation of the kindergarten to this great responsibility, and still greater opportunity?

In weighing this question let us visualize the kindergarten as an intermediate station, or a corridor which lies between the first two epochs of childhood — the pre-school period and the school period. The kindergarten derives much of its power, indeed, from the fact that it lies within the borders of the pre-school epoch, which, all things considered, is the most important period in the whole span of development.

The problems of pre-school hygiene and of school entrance are inseparable, and both are in turn inseparable from the kindergarten. The whole matter of school entrance is in last analysis

¹ Gesell, Arnold: *The Pre-School Child*, chap. v. Houghton Mifflin Company, 1923.

one of hygiene. Matriculation into school life should be conditioned primarily by standards of health and development; and should be regulated by a policy of medical oversight and educational observation. Instead of unceremoniously and haphazardly admitting three millions of children and failing one fourth of our first-graders at the end of the first year, we should gradually reorganize the kindergarten and the primary school in such a way that the school beginner will be under systematic, purposeful observation. This means a gradual relaxation of our present zeal to "teach" him, and the substitution of a much more wholesome solicitude, namely, one to safeguard his health and to understand his psychology.

The kindergarten is admirably fitted for the development of a policy of observation of school beginners leading to a hygienic control of school entrance. The kindergarten and first grade should be gradually reorganized in a manner to bring at least the first half of school life under systematic, purposeful scrutiny. Teachers, program, schedule, equipment, and medical inspection could be adapted to this end. There should be an induction period, with a system of record-keeping, and classification of pupils to determine their immediate educational treatment and their subsequent treatment in the grades.

Many schools are making wise use of intelligence tests in the kindergarten for purposes of diagnosis and classification. Where such tests are properly administered at the beginning and the end of the kindergarten year, there is no doubt that much more homogeneous groups are obtained for first-grade work. It is commonly accepted that a single intelligence test, given to a large group of children upon entrance to first grade, is not a very reliable measure of their ability and that very faulty classification is apt to result. But a year in kindergarten, with several such tests applied and the results supplemented by the teacher's judgment, constitutes probably the best basis now available for satisfactory organization of classes for the succeeding year's work. Correct indication in this way of individual differences in native ability and in maturity would undoubtedly eliminate much

waste in the first grade where there is at present an excessive amount of retardation.

CAN MEASURABLE RESULTS IN SUBJECT-MATTER BE SHOWN?

It must be admitted at once that scarcely anything has been accomplished in the way of standardized achievement tests for the kindergarten. At first glance it may seem that leaders in this field have been very unresponsive to recent tendencies in education and very slow to make use of scientific measurement. Further consideration will show, however, that their situation in this regard is but little different from that of the early primary division of the school. It is a well-known fact that there are very few group tests for measuring achievement that are of any value in the first grade, and these touch in a limited way only the most formal elements of the child's accomplishment. Many competent judges are skeptical regarding the results of any group test in reading for first-grade children, and there is nothing available in arithmetic or language that is reliable. Furthermore, arithmetic is quite often omitted from the required course for the first grade, so why try to measure the results? The most ardent advocate of scientific measurement would hardly insist upon attempting to rate the first uncertain attempts of six-year-olds in handwriting. It is interesting to note that in the numerous school surveys which have been made in recent years achievement tests are very little used below the third grade. Considering the fact that there has always been urgent demand upon primary grades for a good deal of formal drill work, the results of which should be readily amenable to measurement, this is not a particularly convincing showing for standardized scales in lower grades.

Every one is familiar with the fact that even for the upper grades of the elementary school the merest beginning has

been made in measuring anything but the skill side of the tool subjects. In the field represented by the richer content subjects, such as history, science, literature, and that of essential social and personal habits and attitudes, comparatively little has been accomplished in measurement.

In the light of these well-known facts little should be expected in the way of achievement tests for kindergarten children from four to six years of age. They are not only too immature to respond *en masse*, as such tests require, but the curriculum almost universally conceded to be suitable and right for them does not call for much along the line of easily measurable skills.

INFORMAL RECORDS OF RESULTS

Should inability to measure achievement by standardized scales excuse the kindergarten from attempting to give some sort of satisfactory account of results? Only the less thoughtful and less competent teachers wish to be exempt from a clear accounting, for it is evident that such exemption encourages the prevalent tendency to ignore or disparage their work. For many years leaders have been striving to evolve curricula fully in harmony with the most progressive ideas in education and well calculated to lay the foundation for the primary course. In a number of places there are definite specifications regarding the amount and kind of work in literature, music, games, art, industrial arts, nature study, hygiene, and civics which the kindergarten is expected to deal with efficiently. The best practice permits and encourages in addition free choice from a wide range of subject-matter and experience. In a few places reports of ground covered are sent on with pupils promoted from the kindergarten. Such reports consist of titles of stories and songs which they know best, poems which they have memorized, games which they are capable of conducting alone, a

statement of points in hygiene emphasized, and fundamental habits believed to be fairly well established — especially such habits as are of pronounced importance in the school-room. Occasionally specimens of the children's work are sent on to the first grade. Included in these reports should be found also brief records of the most significant first-hand experiences which the children have had, such as excursions and the resulting class activities.

Indications that the traditional isolation of the kindergarten is being overcome are to be found in reports and syllabi from centers where the most earnest consideration has been given to this matter for many years. Among the centers which have evolved some clear statements of objectives and evidences of attainment may be mentioned the public schools of Trenton, New Jersey; Louisville, Kentucky; Kalamazoo, Michigan; Kansas City, Missouri; Lincoln, Nebraska; Duluth, Minnesota; and Fort Wayne, Indiana.

IS A CONTINUOUS CURRICULUM PROVIDED FOR KINDERGARTEN AND PRIMARY GRADES?

Judging by an examination of over one hundred courses of study published between 1908 and 1918, in cities widely distributed over the United States, one must infer that the usual practice has been to ignore the kindergarten in curriculum-making. The investigation showed that in many cities having a printed course of study for the elementary school, there were no printed outlines of any kind for the kindergarten. In some cases a brief outline appeared on a separate sheet, but it was usually evident that the course had no definite relation to that provided for the rest of the school. It seems clear that primary teachers were not expected to be informed regarding the work of the kindergarten. This attitude has fostered the idea that the kinder-

garten year was not to be regarded as an integral part of the school life.

Reliable data were obtained from eighty-one cities known to have public kindergartens, and an analysis of the facts is shown in the accompanying table.

TABLE I

CITIES	I Number of courses of study in which kindergartens are not mentioned	II Number making brief incidental mention of kindergartens	III Number in which kindergartens are treated as integral part of school system	TOTALS
New England and Central Atlantic Coast	28	9	2	39
The South.....	3	2	1	6
Middle West and West.....	15	8	5	28
Pacific Coast..	3	1	4	8
Total.....	49	20	12	81
Percentage.....	60	25	15	

Explanation. This is an analysis of courses of study for eighty-one cities distributed over four sections of the United States. These were published between the years 1908 and 1918. Column I shows that twenty-eight out of thirty-nine cities in New England and Atlantic Coast States made no reference to their kindergartens. Column II shows that nine out of thirty-nine made some slight incidental reference to the kindergarten. Column III shows that two out of thirty-nine gave at least a small section to the kindergartens. Totals in the country at large, forty-nine cities out of eighty-one made no mention, twenty made slight reference, twelve treated kindergartens as integral parts of the school system. Eighty-five per cent (sixty plus twenty-five) of all courses of study examined made little or no reference to the kindergartens.

In many cases the investigators could not tell from the course of study whether there were kindergartens in a given city or not. They were obliged to consult the superintendent's annual report, where (if kindergartens existed) they were mentioned in the financial section and in the list of teachers. When the superintendent's report was not available, they consulted a sheet published by the United States Bureau of Education, which lists the cities having public school kindergartens. Fancy having to make such a search in order to ascertain whether there were high schools in a given city! This investigation tells the tale of isolation very graphically. It may be argued that in most instances there were issued adequate outlines in a separate bulletin which the files examined did not include. A sufficient answer to that is obtained by examining the opening paragraphs under every heading in the main course of study. Under English, Literature, Music, Hygiene, Art, Arithmetic, etc., it is the rarest thing that any reference whatever is found to the year's work in the kindergarten. In almost every instance the first grade is quite evidently thought of as furnishing the very first steps in these subjects. If a separate bulletin for the kindergartens were relied upon to describe the initial work, and if the results were to be taken into account, the attention of primary teachers would certainly be directed to this fact and some recognition would be made of steps already accomplished.

An extensive survey covering many phases of our schools was made recently by the National Committee of Chamber of Commerce Coöperation with the Public Schools and the American City Bureau. The part concerned with kindergarten-primary education was never published, but the present writer has had an opportunity to examine the carefully compiled results.¹ One question was, "What per-

¹ Through the courtesy of Professor J. R. McGaughy, of Teachers College, Columbia University, New York City.

centage of schools have jointly planned curricula for kindergarten and first grade?" Thirty-two cities of over 100,000 population reported as follows:

TABLE II

EASTERN (11 cities re- porting) Per cent	SOUTHERN (6 cities re- porting) Per cent	GREAT LAKES (6 cities re- porting) Per cent	GREAT PLAINS (5 cities re- porting) Per cent	WESTERN (4 cities re- porting) Per cent
45.4	16.6	50	40	100

If the four Western cities reporting are typical, that section is decidedly in advance in attempting to relate the work of the kindergarten more closely to that of the primary grades by means of a unified curriculum.

If these two surveys could be made again there is every reason to believe that the showing for the whole country would be decidedly better. Some exceptionally good courses of study published since 1920 assign to the kindergarten a certain definite responsibility in the total work of the elementary school. They give evidence also of having been planned to a considerable extent by committees representing all departments concerned.

A new departure in curriculum-making is seen in the type which endeavors to point the path of growth and to indicate some of the steps, in terms of behavior or conduct rather than in the customary terms of subject-matter and skill. Such a curriculum has just been prepared by a committee of kindergarten and first-grade teachers coöperating with Miss Patty S. Hill.¹ This piece of work is the outgrowth of years of study and experiment in the effort to discover what

¹ *A Conduct Curriculum for the Kindergarten and First Grade.* Charles Scribner's Sons, 1923.

are the most important and desirable habits for young children to acquire and through what specific situations these habits may best be established. This curriculum attempts to keep experience in direct and essential relation to the desired attitudes and habits of the learner. It is not intended as a complete and all-inclusive curriculum for these years, but it furnishes a much-needed emphasis on a kind of growth which the conventional course of study has largely neglected.

INFLUENCES WHICH TEND TOWARD BETTER COÖRDINATION

Our most progressive training schools are now giving a kind of preparation which fits students about equally well as teachers of either kindergarten or primary grades. No matter which lines they follow later, they will carry with them a sympathetic understanding of the whole range of early education. Large numbers of students whose earlier training was of the more limited type are now seeking through advanced study to gain a more comprehensive outlook.

It is becoming less common every year to have two supervisors, one for the kindergartens and another for primary grades. Such a scheme often encourages further separation and sometimes results in actual discord and unwholesome rivalry. The only rational plan is to treat the kindergarten-primary grades as one department and put in charge a supervisor thoroughly trained and experienced in both fields who can command the respect of different groups of teachers and draw them together for efficient coöperation.

A more generous attitude toward the primary grades in the matter of space, equipment, and enriched curriculum is gradually developing, and this tends to lessen the handicap which these grades have always suffered as compared with the kindergarten.

Educational organizations local and national, which formerly pursued rather narrow lines of study and endeavor, have shown for some years a marked disposition to widen their range. This has resulted in drawing kindergarten and primary teachers much more closely together for the consideration of their common problems. It is a very rare thing to-day for the International Kindergarten Union or the National Council of Primary Education to prepare a program dealing with the kindergarten or the primary field alone. They are working together in an attempt to develop the kind of education which is right for children at all stages of growth.

QUESTIONS

1. Why is it important to keep progress records of some kind in kindergarten?
2. If there are no achievement tests for kindergarten pupils, how can fitness for a higher grade be determined?
3. Is it probable that general and systematic teaching of reading all through the kindergarten would greatly reduce the "failures" in first grade?
4. Show how acquaintance with picture books and stories and rich and varied experiences may be of real assistance in learning to read.
5. Should there be a continuous curriculum for kindergarten and primary grades? Who should construct this curriculum?

CHAPTER IV

HAVE CHILDREN'S PURPOSES AND PLANS A RIGHTFUL PLACE IN THE CURRICULUM?

MENTION has already been made of the peculiarly barren life, foreign to the nature of children, which still persists in a great many primary schools. Even those which on the surface appear to have provided a fairly rich curriculum often seem to have left quite out of account the child's native ways of searching for and appropriating knowledge and skill. The learner as active agent seems to be forgotten in many fine schemes of curriculum-making.

It is a well-known fact that, as each new subject or art is introduced into the school for the purpose of broadening the children's experience and increasing the points of contact with the best that life affords, the cold hand of formalism reaches out and slowly squeezes the very breath of life out of the subject or activity. It becomes only another highly organized study, artificial in character, to be imposed upon teachers and dealt out to pupils in carefully measured portions. Or, if this is thought to be too dark a picture, let us say that these promised enrichments of the curriculum have failed of the best results because they have usually been over-formalized and administered in logical sequence with too little regard for the ordinary uses and needs of children. Drawing, modeling, story-telling, dramatization, dancing, music, and even industrial arts, have experienced this deadening process to a greater or less degree. All too rarely has a way been found to expose young pupils to the fascination of such arts, to invite participation in them, and encourage their free appropriation and use in satisfying personal and group desires and purposes. Still less have the stiff, stub-

born, and ancient arts of reading, writing, and arithmetic been made to take such modest and immediately serviceable rank in the daily life of school children.

James Harvey Robinson¹ writes as follows in his introduction to *A Mother's Letters to a Schoolmaster*. The boy "Peter" mentioned in the passage is the child about whom the letters were written.

... if viable learning is to take place, it must be consistently associated with the vivid experiences and functioning of the learner. Hitherto we have made the fatal mistake of relying too exclusively upon mere reading, memorizing, and the specious rewards or punishments of school routine. The old method is, of course, recommended by its convenience in dealing with large classes, and as our theories change, the whole organization of the school must undergo radical reconstruction. . . . Peter was mystified by the quietness of the schoolroom, and wondered how any one could be *learning* much when the pupils seemed to be *doing so little*. . . .

Human knowledge is as yet very crudely classified from the standpoint of human needs. Our "subjects" and academic "departments" form insuperable barriers to real learning. Our parsings, conjugations, boundings, tables, axioms, principles, can never be expected to form the entering wedge of understanding; they may sometimes be the outcome of it in peculiarly logical minds. Human experience, curiosity, and longings do not fall under the natural headings of reading, writing, mathematics, geography, chemistry, physics, botany, politics, economics, history. Life does not meet us under these captions. We must therefore devise others that are closer to the heart of man. . . . Every child can readily enough and spontaneously enough think in terms of eating, his house and his clothes, his play, his fondness for beautiful things, his curiosity about the world, about buying and selling, getting back and forth, where things come from, and how they come about. These are good enough categories for us at any age when we are not engrossed in the rare occupation of scientific specialization. When we think in these and similar terms, we get active, self-propagating ideas which promise to turn into intelligence and understanding and wise conduct.

¹ Robinson, James Harvey: Introduction to *A Mother's Letters to a Schoolmaster*. Alfred Knopf, 1923. ,

Conscious of this tendency of organized subject-matter and developed arts to go their own way and of the adult mind to fall in comfortably with this course, thoughtful, progressive school people have for a long time sought to break up the formally organized mass of subject-matter into units of more personal significance to children. They have tried to find centers outside the recognized fundamental subjects which would touch the lives of the children more closely and make for greater unity and continuity in the curriculum. To this end, the study of Indian life, Eskimo life, Colonial life, or other phase of history or human experience have been made the basis of organization. Such topics become for a time the point of departure for teaching both the formal subjects and expressive arts. The ideas presented often take concrete form in miniature Indian or Eskimo villages with appropriate primitive tools and implements, dramatic and representative play and costume-making, the laying-out of a pioneer settlement and imitation of primitive ways of doing things, etc. Or, seeking to get further back into the inner impulses of children and through these to approach the school arts, many attempts have been made to draw upon common play experiences for motivation; a play-house to be furnished and decorated by the entire class; a toy circus to be made, with animals of wood, cardboard, or cloth; a miniature farm with block buildings, fences, family, animals, and imitation crops; a grocery store to be equipped, stocked, and staffed for business, etc.

To the extent that these schemes are the children's own either by reason of their suggestion or by willing and eager adoption at the suggestion of another; to the extent that they are largely planned and carried through by the children, thoughtfully and with constant exhibition of initiative and responsible ownership, they are children's projects whether they have been so named in the past or not. And

conversely, to the extent that they are teacher-planned and controlled, guided by anxious eyes fixed upon outward results and meticulous care for effect; to the extent that the scheme is simply an ingenious carrier for less interesting matter, introduced to lighten a dull routine — it is no true child's project or problem whatever it may be called.

WHAT CHARACTERISTICS MUST AN ENTERPRISE POSSESS TO RENDER IT WORTHY OF A PLACE IN THE SCHOOL PROGRAM?

To be of great worth, it must either be initiated by the children or it must offer them rich opportunities for the origination of subsidiary features. It does not matter so much who first thinks of an enterprise. The important questions are, Will the children have the spirit, the ability, and the freedom to take over to a considerable extent the formation and execution of a plan? Will it quickly become *their* affair depending largely for success upon their enthusiasm and sustained effort?

The pseudo child-project is usually suggested by the teacher, planned, "cut and dried" by her, the whole scheme being well determined from the beginning. In consequence the children have small chance to contribute ideas or to carry real responsibility. Much of the exhibition work in our schools is of this character. (This one point, as to who is the chief agent, is very important, because on it depends the development of leadership, self-reliance, straight thinking, and right social behavior.)

To be clearly deserving of a place in the school program, the child's project should also be seen to align itself, at least in a rudimentary way, with one or more of the great fields of human endeavor and achievement, and it must involve situations and questions which will call for real thinking.

To illustrate: A boy proposes to collect tobacco tags, and through the exercise of a certain quality of leadership he

succeeds in organizing a group of boys to coöperate with him. They match and exchange tags and succeed in getting a large collection. Under the criticism of the group, including (for purposes of argument) some older person, these boys may even develop better ideas of square dealing and business honor. Still, this would scarcely be considered a worthy school project, since it is entirely disconnected from any great field of knowledge and achievement, and since the by-products of the scheme are so uncertain and meager.

In contrast to this, a boy becomes interested in butterflies. He asks questions, consults books, and learns about the life-history of butterflies. He starts a collection or begins to check in his butterfly book the pictures and descriptions of those which he has found. He learns to identify different kinds at various stages and how to rear from the caterpillar stage some specimens which he has failed to find. In doing this he learns also how to identify certain plants on which particular caterpillars feed and ascertain where these plants are to be found. Questions calling for further inquiry are constantly arising and other children and some grown-ups are likely to be drawn into the scheme. An interesting objective is given for many excursions to the country and much healthy exercise and wholesome pleasure are obtained. If properly guided, the children learn to handle living things humanely. One such interest with its many aspects may lead out into a gradually widening field of natural science.

Another illustration: A boy proposes to give a "show" with the reflectoscope. This actually occurred in the first grade in the Horace Mann School. He got other children to agree to help furnish pictures for the affair, and together they produced a goodly array of drawings illustrating Mother Goose and popular stories. The teacher printed captions dictated by the artists and the manager, and other

children sorted and arranged the pictures. They introduced also a few photographs and picture postals of special personal and class interest. When the "show" came off, the teacher had to operate the machine, but the manager handed out the pictures as arranged and the audience read the captions. At times individuals who had furnished certain special pictures volunteered some explanation or account. This scheme called for initiative and coöperation, for careful, thoughtful planning, for the exercise of skill in drawing and standards in selecting, so that the pictures would be understood and enjoyed, and an interesting exercise in reading was furnished. The teacher's part did not slow down and outweigh the children's activity, because it was not artificially dragged in, was not overdone, and was in line with what is constantly experienced in moving-picture shows. Such an interest once launched and happily consummated has limitless possibilities for future development as the children mature. Evidence of this was shown by a successful and very fruitful effort on the part of the third grade in the same school in producing, by means of the reflectoscope and explanatory remarks, the story of Jeanne d'Arc in well-organized and very interesting form. The children being older in this case, the affair from beginning to end was more entirely their own.

IN WHAT WAYS DO PROJECTS HAVING EDUCATIVE
POSSIBILITIES ARISE

Does some child suddenly, spontaneously, and out of a vacuum announce that he proposes to undertake a certain thing, or make a motion that the class launch such and such a scheme? Certainly not in the traditional school. The ways in which such activities start in school may be almost as varied as those by which adult activities are launched in the world of affairs.

In the most rudimentary stage and with the youngest children, given freedom and materials of a plastic kind, multitudes of ideas spring up suggested by the experiences of the children and the nature of the material. The mere presence of clay, blocks, wood, hammers, nails, dolls, toy animals, books, crayons, etc., serves to stimulate numerous and varied reactions. Gradually these reactions, which were at first scarcely more than random manipulation of material, clarify into more definite and purposeful acts, and what started as individual play enlarges to include a number of children. A free organization of the group with natural social contacts leads to borrowing of ideas, improvement of technique, and a general raising of standards. Add to these tendencies the well-timed question and criticism of the teacher, and rudimentary manipulation will, before the end of the first year in kindergarten, become organized group activity of a purposeful sort involving at different times practically every phase of the curriculum.

Immature first-grade pupils, or those who have had very meager experience with suggestive materials, may begin in the same way, but this stage should be very brief. They soon become responsive to questions, suggestions, and to the sight of older pupils and adults at work along the same lines. Models, visits to museums, books, and other stimulating influences such as we constantly meet in natural outside life, inspire pupils six or seven years of age and younger to set going numerous plans quite as good from the educational standpoint as any that a committee of experts could devise for a prescribed curriculum. Indeed, their propositions are often better because suffused with deep personal significance and the sense of proprietorship and responsibility.

Teachers who have had much experience in conducting work of this sort testify that second- and third-grade pupils rarely set up projects merely by the line of least resistance,

that of direct response to the presence of materials of a certain type. On the contrary, they have clearly arrived at the more mature process of conceiving of a desired end and seeking the proper means and methods for its satisfactory execution. Since direct concrete stimulation plays now such a small part in giving initiation and direction to the child's voluntary activities, and since conscious purposes of a worthy sort must control, how are these to be insured in sufficient force and variety?



FIG. 8. FREE RHYTHMIC EXERCISES, LOS FELIZ SCHOOL, LOS ANGELES, CAL.

Even where climate and other conditions favor out-of-door life, many schools keep children closely housed except at recess. Los Feliz School, Los Angeles, makes good use of open spaces. These children are giving a free rhythmic interpretation to music furnished by the Victrola which has been wheeled into the yard.

We must remember that children are members of a family, individuals in the larger school family, a part of the neighborhood community, and citizens of the world. It is to these wider relations, then, and not just to the restricted limits of the classroom that we must look for lines of interest

toward which to direct thought and effort. To the extent that vigorous currents from these wide fields are kept flowing freely through the school, will a wealth of profitable questions and proposals arise for solution and execution. As members of a family, there are toys to be made for younger children, stories to be learned to tell at home, serviceable articles to produce, an entertainment to prepare for mothers and fathers. As individuals and groups in the larger school family, there are rooms, building, and grounds to care for and beautify, assembly programs to prepare, a festival to celebrate, and occasions for the exchange of favors and courtesies between lower and upper classes. As members of the neighboring community, there may be a library, park, or museum with which to become acquainted, local movements with which to establish contact, the work of public servants to learn to know and appreciate, and perhaps a day nursery or children's hospital to assist in various ways. And as citizens of the world, children should learn of the streams of benefit constantly converging toward them from the world's work and of the obligation and delight of sharing their pleasures with other children and relieving their necessities. They cannot find the path in these larger and more complex matters except as they are led by teachers with vision and insight.

MANY RICH OPPORTUNITIES FOR PROJECT WORK ARE OVERLOOKED

It is perfectly possible to introduce certain very vital and socially significant questions or movements into the school and permit or compel them to pursue their own single track and independent course, leaving the ordinary traditional curriculum arid and untouched. This was shown in many schools during the World War. The school authorities loyally and faithfully launched, directed, and successfully pushed the Junior Red Cross work, the Thrift Stamp campaign, Food

Conservation, and a multitude of other appealing and worthy interests. But often a narrow or myopic vision caused the school executives and teachers to see these movements singly and in relation only to patriotic feeling developed and quantity of bandages rolled, stamps bought, or Red Cross members secured. It is not intended to depreciate the importance of such results, especially in time of war, but they are not enough. The broader vision of other school executives and teachers enabled them to see how they could accomplish all of these ends and in addition help the children to find, in the specific purposes constantly to the front, the centers for organizing and vitalizing almost all of the school work. A school principal of the type first described was encountered during the time when schools were made distributing centers for sugar. He remarked that all of his time was being absorbed in the labor of weighing, wrapping, selling, and accounting for sugar. Asked whether the upper grades of the school were not assisting in the undertaking, he said, "Goodness! No. I am spending all of my own time, but I can't afford to let those boys and girls take theirs for such work." It would have been perfectly feasible and highly desirable for the older boys and girls to have organized themselves into committees to assist in this business. With the supervision necessary in a matter of such complexity and public consequence, they could probably have accomplished more work in arithmetic than is usually covered in the same time, to say nothing of the other values which would have accrued from voluntary, organized effort linked up with a big national question.

CHILDREN'S "HOBBIES" AND PLAY LIFE ARE SOURCES OF STIMULATING PURPOSES

Adults find food for interesting and profitable action and thought in connection with their avocations and hobbies as

well as in their vocations. Children, too, may be said to have avocations, and no one can deny that they early develop hobbies or lines of special interest and pleasurable occupation. If the school will encourage and draw upon these resources, it will secure another strong impetus and guide to the pupils' doing, thinking, and learning. In many



FIG. 9. OUT-OF-DOOR BLACKBOARD, LOS FELIZ SCHOOL, LOS ANGELES, CAL.

A fence in the school yard has been converted into a blackboard. Opportunity for big bold drawing, excellent posture, and fresh air are conducive to good art and good health. In this case the children are cooperating with evident success. A happy change at times from small individual work.

classes, children will be found who have already made a beginning in the care of pets, simple photography, playing musical instruments, printing, typewriting, gardening, simple mechanics, making valuable collections, and acquaintance with choice books. If encouraged to make free use of these gifts, tastes, and skills in school, such use will be found to germinate all kinds of related activities among the possessors and among the other children, and stimulating relations will be established with the so-called "regular" curriculum.

The play life of children, touching as it does on almost every phase of human experience, should have full recognition. Purposes which arise here are just as serious from the child's standpoint as those of older people, and if properly guided may be just as productive of situations calling for thought, skill, and knowledge. In place of clay marbles and doll dishes made in the kindergarten will come later beautifully decorated beads, bowls, and plates burned in the kiln and permanently serviceable; the crude doll furniture becomes skilled cabinet-work; crude doll clothes and unhemmed aprons and blouses for painting, as made in the kindergarten, become the skirt and middy of the upper-grade girl; and poring over charming picture books should lead into reading and enjoying good literature.

To some extent schools are endeavoring to help children to use their leisure time, especially their vacations, both happily and profitably. Thoughtful teachers and parents know that, if they can get strong currents of interest moving from the school to the home and from home and family back to the school, life as a whole will be enriched. To this end schools are beginning to suggest in an informal way suitable undertakings for children for their vacations. Comparatively few children have the opportunities enjoyed by those for whom the following suggestions were prepared, but the majority have a few summer experiences which would be worth recording. The Horace Mann School gets out a booklet called *What Shall I do Now? Suggestions for Summer Work and Play*. In part the introduction reads as follows:

To the Girls and Boys:

You have probably asked, "What shall I do now?" many times in past vacations. In this little book we have tried to help you solve that problem. We have suggested work and play of different kinds; household tasks, sewing, cooking, carpentry, collections of

many sorts, games for evenings and for rainy days, and good books to read.

We have listed certain occupations for each grade. . . . Whatever work you do, save carefully and bring back to the school in the fall. Next October we expect to have an exhibition of your summer work, and those who have done worth-while things will receive special credit.

A variety of suggestions are offered for each grade. A few examples will be given from the first three. The quotations represent only a small fraction of the entire booklet and are not in consecutive order.

First Grade

Make a picture record book of things you do and learn. Keep this book to show to your classmates in the fall.

Collect pictures of trips that you take.

Collect pictures which you think beautiful. Your classmates may enjoy seeing them.

Keep an outdoor record book. Put in it pressed flowers and pictures of animals or insects doing interesting things.

Perhaps you can keep a little aquarium of things you find in a pond.

Second Grade

Make a ship book of all the different kinds of ships you see. Collect pictures of the ships of other countries and of long ago.

Keep a word book of all the new and interesting words you hear.

Make a collection of something that interests you. Here are some suggestions: stones, shells, leaves, flowers, cocoons, stamps, coins, Indian arrowheads.

Whenever you think of a good joke, story, or poem, dictate it to some one so we can read it in Story Hour.

Get several children together and have a play. Make tickets and charge admission. Have some one take snapshots of the scenes.

Third Grade

Notice the kind of work that is going on about you. It may be farming or dairying, building or road-making, mining or lumbering.

You may visit a dock or a factory. Tell about the people who are working for us and whom we hardly know. Get pictures and snapshots of these people at work.

Make a play or puppet show of your favorite book. Make the costumes; take snapshots of the scenes.

Have a question box in which you put all the worth-while questions you think of during the summer.

The fall exhibit at the school has brought abundant proof of the zeal and industry of the children in innumerable entertaining, educative, and broadening enterprises, and the effect upon the more highly organized part of the curriculum has been most helpful.

It may be of interest to see how the same idea was carried out in a different environment. The following are a few items from *Suggestions for the Summer*, prepared for the second grade, in the State Normal School, San José, California, in 1923. The children evidently did a good deal toward compiling the list, for the opening sentence is:

These are the suggestions you made about interesting things to do this summer. I have added a few.

- I. Make collections for an exhibit to be given in the fall.
Make a collection of shells. Try to learn their names.
Save post-cards showing any places visited.
Take Kodak pictures of any interesting things you do or anything you make. Take pictures of your pets
If you have no Kodak, why not make your own pictures?
Draw on wrapping-paper.
Make a collection of pine cones.
- II. When you make something interesting save it for the exhibit.
(Suggestions are offered for making toy-furniture, wagons, dolls' clothes, and dolls.)
- III. Can you get a large packing-box for a playhouse? (Suggestions for use also as theater, store, engine-house, etc.)

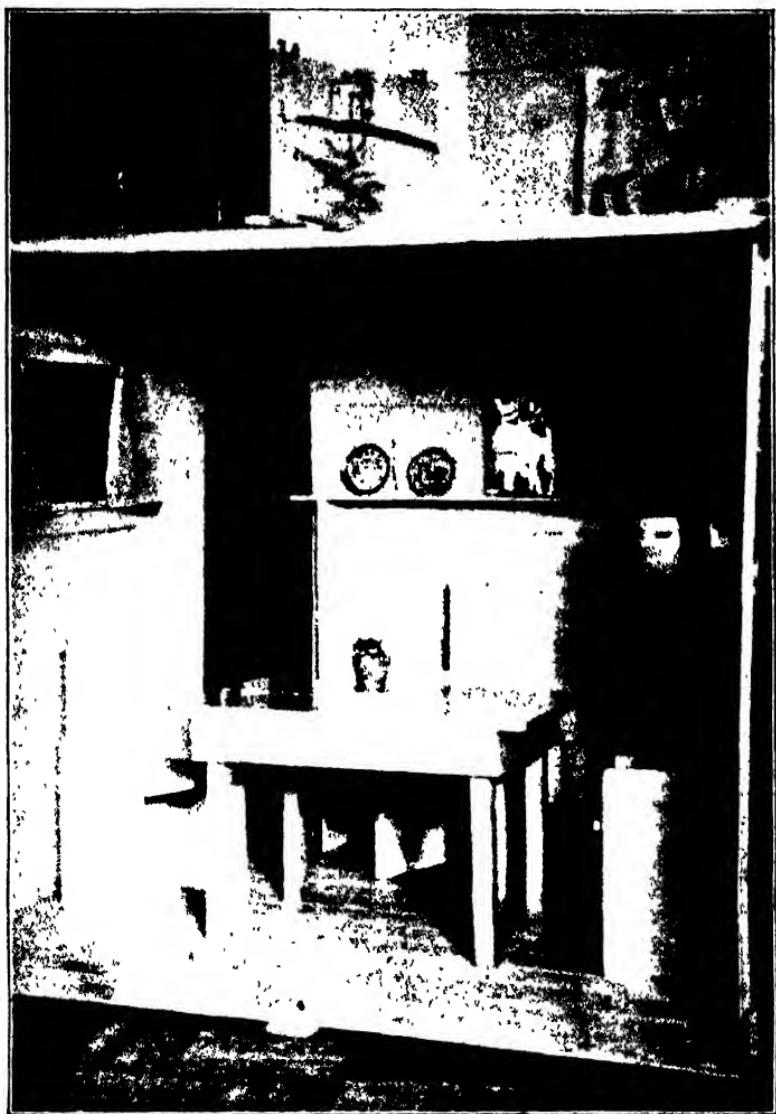
Many other stimulating ideas are conveyed by this sheet and one feels sure that many a happy and profitable hour

was spent by the children who belonged to this class. It is equally certain that much of the new experience fed right back into the school the following term.

GOOD SCHOOLS LIKE GOOD HOMES GENERATE COMMON PURPOSES

There are families and homes where delightful and instructive schemes and employments are constantly being launched and engaged in together; an impromptu picnic, a trip to the park, united earning and saving to purchase a Victrola or moving-picture machine, family concerts and entertainments, birthday parties and hearty festival celebrations, the decision to own a dog or keep chickens with consequent planning and devising ways and means, a home library begun and developed, an evening reading-hour. Into these various plans, old and young throw themselves with happy zeal. Life in such homes is rich, various, and developing, and there is never a lack of worth-while things to do.

Schools are like homes. They range all the way from the stiff, cold, and prison-like type, where everything moves according to military law, to those in which the life closely parallels that of the home just described. It is out of an enriched school life with natural relations, vital common interests, spontaneous suggestions, and friendly coöperation that projects of educative value arise. Life in such a school is in some ways more like the pioneer home than the modern city home. Needs that arise become problems for solution, and children are led to find ways to supply their needs. If dolls are wanted, make them; if wagons are called for, construct them; if bookshelves and paper racks are needed, build them; if there is to be a Christmas play, write it and organize the dramatic action; if you wish a theater, build one with the big floor blocks and decorate it; if cookies are needed for the



**FIG. 10. LARGE PLAYHOUSE, FIRST GRADE, LINCOLN SCHOOL OF
TEACHERS COLLEGE**

Playhouse made from very large box. Children painted and decorated furniture, made curtains and posters, made and decorated plates which were then fired; also wove large rag rug not shown in this picture. A growing enterprise which for a long time suggested new and worth-while features and uses.

party, make them, or at least help in the process; if you want a Valentine song for the party, compose it; if the doll's clothes are soiled, wash them; if candles are called for on the birthday cake or Christmas tree, dip them; if you wish new stories, find them in the books at hand; if you want to be cashier at the sale, learn to make change accurately and quickly.

Complete thinking is necessary in the face of a difficulty, and the developing project is usually full of difficulties of various kinds. The teacher who makes provision for children's projects does not need to search for problems upon which they may sharpen their wits and learn to reason.

SIZE, SCOPE AND GENERAL NATURE OF DESIRABLE PROJECTS

As suggested by some of the illustrations already given, children's projects will vary greatly in size and in the number of people engaged in the effort. The four-year-old in the kindergarten may decide to make a picture with crayons. He may work alone at a small table for ten minutes, complete the picture, and never do anything further with it. In contrast to this, a class of thirty third-grade children may after some discussion decide to supply a baby with milk for an entire school term, and their united effort may occupy many hours of time and reach in innumerable directions both in and out of school. A full description of such a project is given in Chapter V. In this account it will be seen that the main undertaking, which enlisted the effort of all the children, called also for minor individual or smaller group contributions in order to carry the original purpose to a satisfactory consummation.

In the light of known traits of childhood, school conditions, and our social ideals, it is not conceivable that there should be as many projects under way as there are

children in a given class. The latter tend very early to some coöperative effort, and it is in such effort that opportunity arises for training as useful members of organized society. Therefore, the more the chosen activities tend to run in channels calling for coöperative effort and the larger the scope of the project, the better for educative purposes.

We must not think of these voluntary and chosen activities as being entirely of the motor or manual sort even in the early primary years. The defect of the term "project," as applied to all self-instituted work, is that it was originally associated with manual and industrial arts, and was quite commonly applied to some unit in a fixed course of study in which little or no opportunity for choice was given to the pupils. As has been said, a worthy project involves thinking, and therefore intellectual processes will be prominent even in those which seem to be largely manual. But some purposes and plans lie more clearly in the recognized intellectual fields, and these are not neglected in schools organized along this line. Some children early begin to choose the books, cards, puzzles, etc., which lead to reading, and apply themselves to mastering the art either for the sake of the stories or from pleasure in the process, or both. In the second grade they begin to get up reading groups or "clubs" which meet daily with a child-leader for voluntary reading. They put themselves through drill in arithmetic and spelling, sometimes impelled by the desire to prepare for some coveted office requiring such knowledge and skill and sometimes from sheer pleasure in mastery and competitive effort. Again, there may be rigorous, self-imposed drill by individual or group, because achievement in some subject has been discovered to be below standard. Printing apparatus is popular, and out of the original delight in manipulation of a new medium comes the later satisfaction in a new form of recording and communicating. Third- and fourth-grade

pupils will throw themselves with zeal into the study of a period in history in order to answer some question which interests them. They may eagerly pursue some problem in geography or nature study, going far beyond any requirement a teacher would be disposed to make.

In addition to this direct organization of the recognized school subjects into childlike units for study and practice, these subjects are constantly drawn upon in solving problems and executing plans which originate and pursue their main course in some other field. For example, the story of *Snow White* is to be dramatized, and it must be read in several different books to see which version is preferred or to get a good composite version; a puppet show is to be given and the lines must be written for the puppeteers; posters are to be made advertising a performance and the words required must be studied; boats are being made and the children pore over books to learn about primitive and modern methods of boat construction.

HOW CAN CONFUSION AND Lapses IN THE COURSE OF STUDY BE AVOIDED?

"But, after all," it is asked, "what prevents the curriculum from being a perfect hodge-podge under such a method, and how does one ever know what has been accomplished?" To the first part of the question, one might justly parry with the query, "Is not the traditional curriculum a hodge-podge? Where did it come from? Is it not more or less of a patch-work construction brought together piecemeal from ancient and contemporary borrowings?" But to reply more directly and frankly, there is a real danger that the course of study under the proposed plan will lack consecutiveness. For this reason it is considered safer at present to provide a skeleton or outline course of study for each subject indicating the knowledges, skills, and attitudes which valid experi-

ments and investigations have shown to be important at different stages of maturity. This is the longitudinal view of the more abstract phase of the curriculum.

The most competent students of curriculum-making today advise that parallel with this framework there shall go outlines and descriptions of numerous large units of work of the problem-solving or project sort. This should be the real substance of the curriculum. Enough of these examples should be furnished so that the less creative and less competent teachers may get many suggestions. They should be worked out in sufficient detail to show how the abstractions mentioned above are shot through with meaning when brought into relation with real experience and purposeful study. It will be a stultifying influence if these typical organized units come to be regarded as requirements to be carried out in any given school or grade according to form.

Probably no one believes that the rank and file of our teaching corps is to-day prepared to inaugurate and conduct a thoroughgoing curriculum of children's activities. And even if they were capable of this, few advocates of the method would claim that children can thus acquire all necessary knowledge and skill in all subjects during the limited school hours.

To the extent that the children's enterprises do not provide the experience and practice necessary to establish certain facts and skills believed to be essential to further progress, the teacher can launch some suitable plan which will involve these elements. Or, by pointing out the lack and appealing directly to the intelligence and ambition of the children, she can secure their coöperation in the necessary study or drill. The fact that we have in the past drawn too heavily on the latter kind of motive power should not blind us to the fact that children are often impelled to put forth

effort because they obtain satisfaction from the exercise of native capacities and from the mastery of difficulties.

In the matter of continuity we must remember also that the larger, richer experiences of school life offer progression as well as the more abstract types of subject-matter. For example, the same school sale for the benefit of some worthy object might yield practice in making change for second and third grades, training in setting correct prices for third and fourth, and experience in percentage and bookkeeping for more advanced pupils. The same festival might stimulate the kindergarten children to evolve a simple rhythmic movement expressive of some appropriate mood or idea, while the upper primary grades work out the historical background for a more formal dance or compose words and music for a song. It is not uncommon to include the study of some food product (as milk or cereal) in the health program of a school for several successive years, new facts and new implications being considered each year according to the maturity and past experience of the pupils.

As to knowing what is accomplished, schools in which a good part of the curriculum is of the type under discussion are not afraid of the standardized tests and scales which are used to measure more formal work. So far as these tests go, they will measure the product of the informal method also. But new modes are needed for estimating what is accomplished by new methods of work, in aesthetic appreciation, in improved standards of social behavior, and in habits essential to good citizenship.

QUESTIONS

1. What differences are there likely to be between a conventional curriculum unit on Indian life and a genuine pupil project involving the same subject?
2. In studying an exhibit of children's work what are some of the things you would like to know?

3. What activities did you engage in as a child which might be worthy of a place in the school of to-day?
4. What worth-while vacation activities suited to your locality can you think of for the children in your school? How would you expect to use the results?
5. Some teachers say that the exactions of the course of study and the use of standardized tests make it impossible for them to give any place whatever to children's purposes and plans. What responses will you make to this?

CHAPTER V

SOME SPECIMEN ENTERPRISES OF SCHOOL CHILDREN — HOW TO JUDGE THEIR WORTH

SALE OF LEMONADE AND COOKIES IN CONNECTION WITH THE KINDERGARTEN — PRIMARY FAIR

Second Grade, Horace Mann School. Miss Mildred Batchelder, Teacher. Plan developed under the guidance of Miss Mabel Crumby and Miss Grace Parker, Graduate Students, Teachers College.

FOR some time it has been the custom of the kindergarten and the first and second grades of the Horace Mann School to hold an annual fair for the benefit of the Manhattanville Day Nursery. The children are interested in the nursery because their parents are interested in it, and they, themselves, have contributed to it each year.

Early in the spring the custom was recalled in the second grade, and also the fact that it was traditionally the part of this class to have a "tea-room" where lemonade and cookies were sold.

This report is an outline of the steps in development and the more evident outcomes of this undertaking.

1. Decision of the group to have a "tea-room" at the Annual Spring Fair, and to use the proceeds for the Day Nursery.

2. Planning:

a. Time in which to prepare.

b. Committees to carry on the work.

(1) Decoration -- to consult with art director.

(2) Buying -- to price and buy lemons, oranges, and sugar.

(3) Advertising - to consult with art director with regard to making posters and costumes for sandwich men.

(4) Cashiers.

(5) Cooking — to make cookies and lemonade and to wrap and tie cookies.

(6) Selling.

(Meetings were held by the various committees to plan their specific share in the work.)

c. Writing invitations to parents.

d. Writing record for year book.

- e. Means by which to earn money for buying materials.
(This provided for the launching of a sub-project which will be outlined at the end of the report.)
- 3. Development of plans.
 - a. Study of the calendar.
 - b. Making posters. (All the children designed and made posters. Those doing the best work were allowed to go to the art room for special help in making posters for display.)
 - c. Making caps for those who were to sell lemonade and cookies.
 - d. Making costumes for sandwich men.
 - e. Freehand paper-cutting (flowers for decoration of tea-room).
 - f. Arrangement of tea-room and placing of decorations.
 - g. Learning to make change.
 - h. Making booklets in which to keep individual records of progress.
 - i. Writing invitations to parents.
 - j. Writing record for year book.
 - k. Reading recipe.
 - l. Making cookies by three groups of children, four in group, with assistance of the domestic science teacher. (Each had his turn to measure, stir the mixture, roll out the dough, choose the cutter, cut, and sprinkle sugar on the cookies.)
 - m. Squeezing lemons and oranges.
 - n. Serving lemonade and cookies at booth.
 - o. Selling cookies from baskets.
- 4. Judging results.
 - a. Quality of product — lemonade and cookies. Taste and skill exhibited in decorations and arrangement of booth.
 - b. Ability to carry responsibility on day of sale.
 - c. Efficiency in duties undertaken — selling, serving, keeping booth tidy.
 - d. Receipts sufficient to fulfill original purpose.

Outcomes in Subject-Matter and Skills

- 1. Arithmetic.
 - a. Making change.
 - (1) Naming coins in two ways.
 - (2) Placing coins in order of value.
 - (3) Counting by 5's to 50.
 - (4) Multiplication table of 5 to 10×5 .
 - (5) Division by 5 (how many 5's in 25?)
 - (6) Number nickels in dime, quarter, and half dollar?
 - (7) Number dimes in half dollar.
 - (8) Number quarters in half dollar.
 - (9) Making change — 5 cents from 10 cents, 25 cents, 50 cents in various ways and judging which is the best way.

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- (10) Finding the cost of several articles when the cost of one is 5 cents.
 - (11) Making change from 25 cents and 50 cents, several articles being bought at 5 cents each.
 - (12) Making change from a dollar by those who asked to do it.
 - (13) Writing dollars and cents.
 - (14) Column addition of dollars and cents.
 - (15) Counting money to check addition.
 - (16) Subtraction (expenses).
 - (17) Concept $\frac{1}{2}$ (paper-folding to make tickets).
 - (18) Work with calendar.
 - (a) Number days in March and April.
 - (b) Number school days in month.
 - (c) Number school days from March 6 to April 27.
 - (19) Concept $\frac{1}{2}$, $\frac{1}{3}$ in connection with measuring parts of cups-fulls.
- 2. English.**
- a. Oral discussions.
 - b. Written composition. Invitations, advertisements and records.
 - (1) Ability to organize.
 - (2) Paragraph.
 - (3) Margin.
 - (4) Spelling.
 - (5) Punctuation.
 - (6) Capitalization.
- 3. Art Work.**
- a. Designing (original).
 - (1) Repetition.
 - (2) Spacing.
 - (3) Use of colors (crayons, water-colors).
 - (4) Printing.
 - (5) Freehand paper-cutting.

SUB-PROJECT

Entertainment for Dr. McMurry's Class

- 1. Purpose:** to earn money to buy materials to make cookies and lemonade.
- 2. Planning:**
- a. To use Indian dramatization, marches, and dances worked out in the physical training period. Also costumes including suits and headbands.
 - b. To make tickets decorated with Indian symbols and marked with the price.
 - c. To learn to make change in order to be ticket-sellers.

3. Execution.

- a. Completion of costumes.
- b. Making tickets.
- c. Perfecting and unifying Indian activities into a program.
- d. Drill in making change.
- e. Counting money by individual cashiers.
- f. Finding total receipts by addition and checking by counting.

4. Judging.

- a. Project as a whole satisfactory, amount realized \$4.57.
- b. Realization on part of the children that only a few had learned how to be cashiers. Others were stimulated to continue work in making change.

The committee feels that the project had real educational value in helping children to identify themselves with an important community interest, in motivating the study of worth-while subject-matter, and also in developing desirable attitudes and habits. Among these are the steadiness necessary to organize and carry through an undertaking, coöperation, unselfishness, neatness, and accuracy.

FAIRFAX SCHOOL — FIRST GRADES, CLEVELAND HEIGHTS, OHIO
Teachers — Bertha Burnett, Marguerite Jack, Abigail Shannon,
Mabel Mayer, Hazel Storck.

French Bazaar

An activity which proved mutually helpful and purposeful was a French Bazaar given by five first grades of Fairfax School, Cleveland Heights, Ohio.

Two war orphans — Marguerite and Etienne B., of Montrouge, France, had sent cards, letters, and even little home-made gifts to the children of Fairfax School as an expression of gratitude for a box sent at Christmas.

The children of our school, wishing to contribute further to the support of Marguerite and Etienne — their "little French brother and sister" — planned and executed a sale or Bazaar.

That this Bazaar might be a full and free expression of the group, many conferences were necessary and numerous and lengthy discussions were held before the following were listed and approved:

1. Articles to be made.
2. Materials required.
3. Money values.

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4. Kinds of labor.
5. Price lists.
6. Classifying and labeling.
7. Arrangement of store.
8. Duties of salesmen.
9. Making change.
10. Attendants, clerks, ushers.

The articles were made of clay, wood, fabrics, flower jars, etc.

Each child was free to choose the article to be made and the material for it, but was required to keep to the list approved by the group. Each completed article was submitted to the group for approval.

The advertising was an interesting feature. Pupils wrote notices to parents and friends; a bulletin was placed in Central Hall; a parade was made through upper-class rooms — large painted and framed placards announced kinds of articles for sale — American and French flags were carried and photographs of Marguerite and Etienne were displayed.

The day itself was a memorable one. The morning was given over to arranging tables with tissue and crêpe paper coverings; placing articles and price tags; assigning duties. The afternoon saw each child, in his "best bib and tucker," take his place as attendant or usher, clerk or cashier, with a conflicting sense of dignity and hilarity.

Almost every home was represented by a buyer.

The results were most gratifying.

In checking up later, we listed the following by-products:

1. Gratitude to parents.
2. Letters to French children.
3. Replies from French children.
4. Counting of money.
5. Bank draft.
6. Individual statements of work accomplished and amount earned.
7. Joy in working with and for others.
8. Giving criticisms helpfully and kindly.
9. Receiving criticisms gracefully and gratefully.

PROJECT — OUR NEIGHBORHOOD, CLEVELAND HEIGHTS

Grade II A, Fairfax School. Miss Lela H. Durler, Teacher.

* A request came from the Principal to reduce, so far as possible, the number of children staying for lunch. The children were asked

to time themselves as they went home to determine who were rightfully entitled to the privilege of staying for lunch.

The next morning many disputes arose, owing to the fact that some hurried home, while others loitered. This brought forth the need of a "picture" to prove distances. A few attempts at such drawings were made to prove to the class that one child lived farther from school than another. The need of a map was expressed, and, as no large map could be found, one was drawn on the floor.

In order to help the children get the sense of locality, churches, school, stores, and filling-stations in the district were located and marked with certain colored dots. Following this, each child came up to the map, traced his way from school to his home, and put his "home dot" of green on the proper side of the street and approximately the correct distance from the street intersections. Finally a half-mile circle was drawn around the school dot to make the comparison of distances easier.

On the sand table that afternoon several boys tried to settle an unfinished dispute about the locality of their homes by marking out streets and tracing their way home.

From this came the suggestion that we make play streets to match the map. Several children brought tiny toy cardboard and wooden houses. A painted matchbox served for the schoolhouse. Cardboard streets were laid out that extended between Lee and Taylor Roads and from Shaker Lakes to Meadowbrook Road. The size of the sand table was the only reason for such narrow boundaries. Several weeks were spent on this.

Visitors' Night gave an incentive for making a more finished product, and changed the spirit of play into active work. Details, such as sponge trees, flower-beds of tiny cut-outs, tiny people of pegs and crêpe paper, park benches, boats on a glass lake, telephone poles, street signs, automobiles, fire plugs and fire engine, put on the finishing touches. The display was used not only for the entertainment of adult visitors, but other rooms were invited in to see it. On such occasions each child had an opportunity to explain to some little visitor the work that interested him most.

Other results gained by the project:

1. The need for, and use of a map.
 - a. Understanding of directions as used on a map.
 - b. The relative locations of places in the neighborhood.
 - c. The comparing of distances.

2. Directions out-of-doors.
3. Acquaintance with the neighborhood.
 - a. Reading of street signs.
 - b. Location of fire plugs which led to further information concerning the Fire Department.
 - c. Location of building and homes of other children.
4. Closer companionship.

After the last "home dot" was placed we were just like a huge family, each knowing where the others lived. Remarks were made expressing an intelligent appreciation of the efforts expended by those who lived at the greatest distance.
5. Respect for the privileges offered by the cafeteria.
6. Coöperation at the sand table.
7. Respect for loaned property on the sand table.
8. Spelling of names of streets.
9. Careful and uniform printing for street signs.
10. Skill and patience in handiwork.
11. Appreciation of their own work.
12. Counting and measuring on sand table.
13. Ability to explain their project to adults and children, with some consideration as to the points that would probably interest each individual guest.

STUDY OF MILK

Horace Mann School. Third Grade. Miss Mary R. Lewis, Teacher.

This unit of work was the result of a study of Health, through which the children learned that milk is one of our most important foods. They raised so many questions about the source of the supply for New York, the different grades of milk, how it is kept pure, etc., that we decided to make a list of these questions in order to see which could be dealt with. The questions were written on a chart, and as the study progressed, new ones were added, and those which were satisfactorily answered were checked off. These are the questions which appeared when they were assembled for the first attack:

1. How do we know what milk contains?
2. What is meant by Grades A, B, C?
3. What is pasteurized milk?
4. Where does our milk in New York City come from?
5. How is it shipped to New York?
6. Who brought dairy cows to this country?
7. How much milk does a cow give a day?

8. How does the farmer take care of his cows?
9. How many people help us to have milk?
10. How is milk used in cooking?
11. Where can we find the answers to all of our questions?

(One shelf of the classroom library was reserved for books, magazines, advertising material, pictures, etc., which might be of help in this study. Both teacher and pupils contributed to this.)

The children thought that question 2 should be taken up first, because it was probably important as regards health and because they were sure information could be readily obtained. Some of them knew of the Sheffield Farms Dairy Station, which is not far from the school, and a trip to this plant was planned. Here we learned about the New York City supply, shipment of milk, pasteurization, grading of milk, measures taken for cleanliness, delivery, etc. When we returned, the trip was discussed, and it was found that not only had we secured the answer to question 2, but that we had found answers to other questions also.

We greatly wished to visit a dairy farm, but that was not possible, so we turned to books, pictures, and lantern slides for information.

We wrote letters to the manager of the Sheffield plant thanking him for the help he had given us.

We pasteurized raw milk at school by filling a test tube and heating it to 145° . This temperature was held for the time necessary for pasteurization.

We made butter, cottage cheese, pressed cheese, junket, cocoa and ice-cream at school. These activities grew out of our discussion of uses of milk in cooking, or how the food value of milk may be secured in a variety of ways.

About this time another line of interest had culminated in the decision of the class to help in some way in the care of a particular baby at the day nursery near by. We chose a tiny boy named Jimmie who needed at the time a good supply of milk. Money would be required, and the "Ways and Means" Committee decided on a sale of cookies in the hall of the school. The coöperation of the Domestic Science teacher was secured, and by working in relays a quantity of cookies of a very salable kind were produced. This was so timed that the children were able to use in their cookies the butter which they had already churned. We advertised the sale by means of speeches made in different classrooms and by posters placed in conspicuous places in the halls. We made about

nine dollars from this sale and the proceeds were used to furnish Jimmie's milk over a considerable period.

A group representing the class visited the day nursery and became acquainted with "our baby." (See Fig. 11.) There were a number of situations in this connection which called for oral and written English.



FIG. 11. A VISIT TO A DAY NURSERY

A committee from Third Grade, Horace Mann School, visits a neighboring Day Nursery to get acquainted with the particular baby whom they are regularly supplying with milk. A beginning in intelligent social service resulting from a study of the importance of milk in the lives of children.

The arithmetic for a period of several weeks was greatly enriched in meaning by the calculations really needed to carry on the undertakings and by those which helped to interpret certain facts. As almost always happens in any genuine situation involving number, problems arose calling for facts and skills not at the command of the third-grade children. The teacher then decided upon one of several courses:

To perform the operation herself until certain results were obtained which pupils could again deal with.

To submit the problem to a higher grade for solution, the results
• to be reported back to the third grade.

If the operation were only a little beyond the children's power,
postpone until suitable drill could be given.

The Sheffield Farms Company loaned us a moving-picture film which told the story of milk. This picture inspired the children to make a "movie" of their own. Only by a considerable stretch of imagination would a matter-of-fact grown-up conceive of the result as a moving picture, as it was more like the old-fashioned panorama. (Fig. 12 shows a picture of the "film.") It consisted

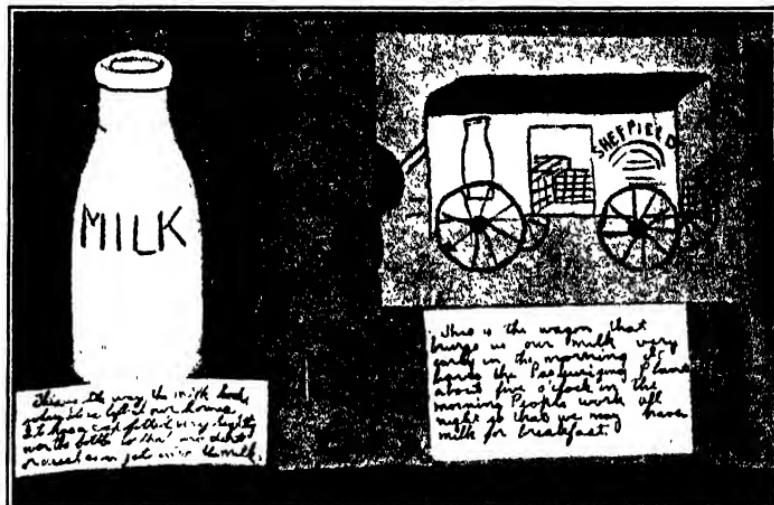


FIG. 12. SMALL SECTION OF A "MOVING PICTURE" MADE BY PUPILS IN THIRD GRADE, HORACE MANN SCHOOL.

Drawing, painting, lettering, written composition, diagrams, and almost every type of graphic art were used to record and explain their study of milk.

of a scroll made from a yellow window shade torn into three lengths or "reels" each a yard long and twelve inches wide. These were later pasted together giving a total length of nine feet. A committee of children selected by vote had charge of the work. They called upon others for plans, drawings, paintings, cut-out pictures, written explanations, etc. These were pasted on the scroll in a sequence which would give a complete record of the work done. The "film" was called "Milk from the Farm to Us."

Then the mothers were invited to see it. As each section was unrolled by the "operators" in charge, a speech of explanation was made by children who had chosen certain parts upon which to talk.

The speeches given in connection with the picture shown in Fig. 12 were as follows:

"This is the wagon that brings us our milk very early in the morning. It leaves the Pasteurizing Plant about five o'clock in the morning. People work all night so that we may have milk for breakfast."

"This is the way the milk looks when it is left at our homes. It has a cap fitted very tightly over the bottle so that no dirt can get into the milk."

Other pictures were explained by such remarks as:

"This is a picture of a little baby. How fat she is — because I think she drinks cow's milk."

"This is the way a healthy baby looks. This is my little brother."

"This shows the churn we used. We got a big lump of butter. Then we drank the butter-milk. We made cookies with the butter that was left."

"After we had our cookie sale, we got about nine dollars, and this money was sent down to the day nursery to a boy named Jimmie, so that Jimmie might get milk. Next year when we are in fourth grade we think we will help him too."

TRANSFORMING A PORTABLE BUILDING

*Fort Wayne Normal Training School, Fort Wayne, Indiana.
Miss Rena Allen, Teacher.*

We had a portable school building which no one liked. Parents and teachers together discussed the matter, and it was quite generally agreed that such a room was unpleasant, uncomfortable, and inconvenient. The teachers did not want to teach there and parents did not want their children to study there. However, there was neither time nor money to build a permanent addition to the main building and we must have more room.

As I walked through this much-discussed portable with its long row of small windows, its unsightly jacketed furnace, its forty nailed-down seats occupying most of the available space, and its generally unfinished appearance, I did not blame either parents, teachers, or children very much for their desire to avoid such a place, but I wondered if something could be done to render it more acceptable. Finally I agreed to take a group of forty *Three "A"-Four "B"* children and see what we could make of it.

The first day of school I faced a disappointed group of children. I sat down with them and said, "Do you know why I chose this room?" There was a chorus of "no's." "Well," I said, "I chose it because it was ugly, and I thought perhaps we could make it better."

The suggestions that came first were too ambitious, as we had practically no money to spend; but finally one little girl said, "Perhaps curtains would help some." After that, other good ideas came in rapid succession. A screen to hide the stove — pictures on the wall — a flower-box full of flowers — a bookcase, etc.

We decided to keep our plans as secret as possible, and at the end of six weeks invite our friends to judge the result.

The girls made Dutch curtains of cheesecloth — two strips at each end of the long row of windows, and a ruffle across the top. We were careful not to shut out too much light. These curtains we stenciled by using the end of a spool on an ink-pad.

The boys made window-boxes, a bookcase, and a screen to hide the stove.

The seats troubled us not a little until one of the boys suggested moving them over, pushing two rows together and having the extra aisle space at one side. The girls then suggested weaving small rugs to use if we wished to sit on the floor. (We were fond of doing informal group work, and we had no little chairs.)

We made looms from boxes, and the children brought rags from home which they cut and sewed in school and wove into a "hit-and-miss pattern." We finally sewed these small rugs together and made one large one.

We had an old library table. The girls stenciled a runner to match the curtains, and some one contributed a bowl of goldfish and a lovely green bowl for flowers.

We arranged our room in three sections. The library corner for study and recreation, the fixed seats for individual study work, and the "business corner" for group work. The children were enthusiastic. They came early and stayed late so that our regular work was not interfered with.

The last day of preparation came. Before we left that night, we put the room in order. The rug was on the floor, the bookcase was filled with books. On the library table were the runner, fish globe, and books. Small rockers contributed by the children were so arranged as to give an added air of informal comfort.

The business corner had its small chairs (secured by the Principal,

after seeing our efforts) arranged in a convenient group by the blackboard.

The window-boxes were filled with the fern-like green of carrot tops, for, as one little boy remarked, "If they freeze we can always get another carrot." The bowl at the rear window was filled with bright-colored zinnias.

The screen covered with burlap concealed the ugly stove and at the same time served as a bulletin board.

With the soft curtains at the windows the whole effect was most "homey," attractive, and comfortable.

Next morning I found the children standing in rather awed groups, strangely silent and just gazing at their transformed room. It was their plan carried out, and they were evidently impressed. One little girl standing near slipped her hand into mine and said, with a queer little catch in her voice — "Miss Allen, I never had a room that I liked like this." I am sure the rest of us felt the same way.

The parents who came in response to our invitation were delighted, and so far as I knew there were no more complaints regarding the use of this portable building.

PUPPET SHOWS IN FOURTH GRADE

Horace Mann School, Miss Ethel M. Orr, Teacher.

Our children have had numerous opportunities to see good puppet shows, and one boy in the fourth grade conceived the idea of making a small one himself. He started it at home and brought it to school in an unfinished state. The play was original and was called *Life in Japan*. An attempt was made to represent the people, customs, and scenery of Japan and to have a little dramatic action, but this first play never passed beyond a very crude stage.

As always happens when any especially fascinating enterprise is launched, several children soon took up the idea and began to develop it in their own individual way. Before the year was over, at least ten different puppet shows were brought to completion under as many different leaders. In general form they were much alike. A soapbox or other medium-size wooden box was secured. The open side became the front of the theater, and the larger part of what was then the top was removed in order to permit the puppeteers to operate the figures by manipulating strings or fine wires from above.

Numerous problems arose which called for patient experiment and sustained thinking. What kind of figures to use and how to operate them, were pressing questions. After numerous experiments most of the children settled on small celluloid dolls. Some of these were jointed and some were not. There was no attempt at a network of strings by which to secure gesture. The figures were suspended from the back of the head, and action was always very simple, crude, and stiff.

Various schemes were tried for weighting the dolls so their feet would glide along the floor. Sometimes lead weights such as tailors use were attached to the clothes. The method which proved to be most effective and most easily accomplished was to slit the hollow celluloid dolls and drop in enough small shot to give stability.

The children soon turned their attention to devising ways and means to shut off the view of the puppeteers from the audience and to get the figures on and off the stage in a more adroit fashion. G. E., who was one of the first to develop a play, worked at home more or less and had considerable assistance from his father. Together they produced a charming little stage with real wings well placed for exit and entrance of puppets. G. E.'s play was *Cinderella*, and he had particularly artistic scenes and effective stage properties. Other children solved the problem by placing small screens about the stage in such way as to conceal to some extent the manipulation of the figures. All admired G. E.'s stage, but were quite happy with their own after they had done their best.

The matter of a curtain proved to be more or less troublesome. Some made cloth curtains with rings intended to slide on a wire, but they proved to be rather clumsy for such a small stage. A window-shade to roll up and down was adopted by some and a piece of cardboard to drop down was the simple expedient of others.

No small difficulty was presented in the matter of preparing suitable costumes for the small dolls. Both boys and girls worked quite independently and the boys proved to be more clever than the girls at the task. They evidently conceived of themselves as theatrical costumers and producers, and there was no suggestion that they were sewing doll clothes.

Two of the boys conceived the idea of having electric footlights and side-lights. A special science teacher, who was already doing some work with this class, was consulted, and together he and the boys evolved a scheme for attaching tiny bulbs. The whole class

shared in this simple lesson in electrical attachment and participated in the discussion aroused.

Pictures of two of these little theaters are shown in Figs. 13 and 14.

With two exceptions all the plays represented scenes from such familiar stories as *Cinderella*, *Alice in Wonderland*, *Snow White and Rose Red*, *Red Riding Hood*, *King Alfred and the Cakes*, and *Tom*



FIG. 13. A PUPPET SHOW, FOURTH GRADE, HORACE MANN SCHOOL
Puppet show operated by the owner who originated the play "Life in New York."



FIG. 14. A PUPPET SHOW, FOURTH GRADE, HORACE MANN SCHOOL
Boys installing electric footlights for puppet show.

Sawyer. M. H. was, in a way, more ambitious, and undertook to write an entirely original play as well as to produce it. He called his play *Life in New York*, and the dialogue proved to be exceedingly entertaining to children. It also furnished much amusement to the grown-ups who saw it. This boy found at the five-and-ten-cent store a small doll with only one leg. He seized upon this damaged toy and cast it for the part of Crippled Johnnie, who developed into a very important and lively character in the realistic play about New York apartment-house life.

The originators and owners of these puppet theaters drew other children into their schemes in various ways until practically all the class were participating to some extent. They assisted in composing the dialogue and criticized the plays at various stages. At intervals larger groups worked under the direction of the teacher upon the English involved in the enterprises. Two or three children were called in to serve as puppeteers for each play. They had to manipulate the figures and speak the appropriate lines "in character." This called for preparation on the part of a number of children, frequent try-outs and good team-work. When these little plays were given for the entertainment of other classes, responsibility was thrown on different children to extend invitations, look after seating, and make explanatory speeches.

The final culmination, and one not anticipated in the beginning, was the offering of four of these puppet shows as the fourth-grade contribution to the annual Spring Fair for the benefit of the Manhattanville Day Nursery, and other child-welfare work. The fair took place after school hours, and a room was set aside for the little theaters. Remarkable organizing ability was demonstrated by the children. They formed themselves into committees and made themselves responsible for certain duties. The plays were advertised in distinctive ways by posters, sandwich men, and oral announcements. A real program was worked out consisting of short speeches serving to introduce the different plays, and selections to be played on the Victrola during the time required to set up the different theaters and get the puppeteers in place. An admission of five cents was charged, tickets were made and sold at the door, and accounts were carefully audited. A gratifying amount was realized for the support of the child-welfare work.

Outcomes

1. Excellent social adjustments involving leadership, coöper-

- tion, and concerted action toward ends realized to be important.
2. Excellent training in the organization of ideas and materials and of the social group. Also the actual test of such ability.
 3. First-rate thinking in the face of numerous smaller or larger demands.
 4. Fuller acquaintance with an ancient and almost universal form of dramatic expression and one especially appealing to children.
 5. Much entertainment and pleasure of a very desirable kind calculated to attach children to the life of their school.
 6. As suitable, valuable, and varied English work as this grade has ever had over a similar period of time.
 7. Increased skill and improved taste in manual arts, and fine art of a specific kind.
 8. Some excellent experience in arithmetic appropriate to the grade.
 9. Satisfaction of the group in realization that they had produced something of genuine worth in an important community affair.

The following reports tell their own story. They are not written up as organized project work, as were the preceding records, but reproduce oral accounts given by children following upon some of their excursions or other interesting experiences.

The teacher wrote the children's statements on the blackboard, and later had the complete "stories" multigraphed so that each child had a record of outstanding activities and events of the year in a form which he could read.

These reports are from the second grade, State Normal School, San José, California; teacher, Miss Martha Porter. The present writer has the full report of social studies, environmental life, and nature study as developed by Miss Porter during the fall of 1922. It is easy to read between the lines and see how rich is this curriculum in fruitful activity which engenders a great variety of related activities of a valuable kind.

Titles especially noted in the series are:

- Our Trip to the Campus. (Getting acquainted with the trees.)
- Going to the Market. (A study of local food supply.)
- Our Trip to the Engine House. (Fire Prevention Week.)
- Our Halloween Party.
- Our Trip to the Sperry Flour Company.
- Our Trip to the Cold Storage.
- Going to the Sunsweet Packing House.

Our Halloween Party

We gave a party for the first grade.
This is the way we got ready for it.
Jack D—— brought some pumpkins.
We made jack-o'-lanterns out of them.
Several children brought nuts
and apples.
We cracked the nuts ourselves.
Wilfred brought some jelly beans.
We made four molasses cakes.
We cut out paper napkins
and decorated them.
We made paper plates
with designs on them.
Robert N—— made some place cards.
We set the tables, and decorated them
with jack-o'-lanterns
and strips of crêpe paper.
We learned a little dance
for our party.
Some people believe
witches and brownies and fairies
come out to celebrate on Halloween.
So we played we were brownies
and fairies.
The brownies and fairies
were all asleep.
The old witch woke the brownies
and they danced
until they were frightened
by a loud noise.

THE PRIMARY SCHOOL

Then the witch woke the fairies.
They danced until the fairy queen
led them away.

We made brownie caps and fairy caps.
Marthella and Marie
made the witch costume.

We learned some games for our party.
Earl, Betty J., Sylvia and Lois
taught us how to play them.

Lois showed how to pin the tail
on the big black cat.

We wrote some invitations
to the first grade.

We invited Miss F—— and Dr. F——.
The first grade answered our letters.
So did Miss F——.

We had a very good time at the party.
The first grade liked the party
and thanked us.

While we were at the table
Miss F — took our pictures.

Later in the year comes a record made into booklet form called, *Our Hen Book*, a small part of which is given below:

We have a hen.
She is hatching fifteen eggs.
We hope they will all hatch.

We put a dust bath
for her in the old bird cage.

We got the earth
over by the trees
where they are blasting.

We give her water
and scratch feed every day.

Alden brought a can
for the feed, and Sylvia
brought a pan for water.

Bennie brought some gravel.

Robert, Jack and Sylvia
brought scratch feed.

How Eggs Hatch

Our hen came the fourteenth of April
and the eggs are going to hatch
the fifth of May.

The hen keeps the eggs warm
and turns them over once a day.

She does that to keep the chick
from sticking to the shell.

At the end of three weeks
the chick pecks its way
out of the shell.

How Chickens Hatch Without Their Mothers

We went on the Willow car to the Santa Clara Valley Hatchery. We saw incubators. The incubator was big, with doors. When you open the doors you can see eggs. One incubator held twelve thousand eggs. They turn a crank to turn the eggs over so the little chicks will not stick to the shell. There was a gas heater to heat water pipes and a fan to send the heat through the incubator.

We saw a chicken's bill peeping out of the shell. A little chicken was pulling and pulling, trying to get out of its shell. There were some boxes with little holes in, to ship the chickens away. In the morning the chickens are not strong enough to stand on their feet. In the afternoon they are. They have brooders to keep the chicks until they sell them.

The writers of these reports have in most cases pointed out some of the principal direct and indirect values or outcomes of the several projects described. In addition we should note certain points of worth found to some degree in all of these enterprises.

1. They exhibit an expanding field of interest and offer a range of experience much broader than that of the conventional primary school.

The occasion of the French Bazaar for example takes the children across the ocean to enter into the lives and needs of other children. In order to carry out their plans they must

also reach out into their own neighborhood and draw parents and adult friends into a common undertaking.

Similarly the Spring Sale brings the school into contact with an important community institution, the Day Nursery. In order to fulfill the obligation entered into, almost all the knowledge and skill which the second-grade pupils possess or are capable of acquiring in a limited time is called upon.

The Milk Study goes far beyond the ordinary features of the health program and carries the children into a genuine social study of one of the most important industries in modern life. It embraces not only the interests and needs of the children concerned but the welfare of other children as well.

In the reconstructed and beautified portable building the children took over for solution a problem which was really the concern of the school and the community. In so doing they were getting fine training for a high type of home-making and a larger citizenship.

2. The projects described give added meaning and importance to much of the more routine work of the school. The practical demands of these enterprises also serve as impressive tests of achievement. These seven reports taken together furnish examples of superior work in oral and written English, arithmetic, fine arts, industrial art, hygiene, literature, and civics. They also show possibilities in the direction of geography and nature study.

3. The opportunities are great for training in habits and attitude that are of the utmost importance in the immediate and future lives of the children. The ability to carry responsibility, to think clearly, to study effectively; the ability to see things from a less individualistic point of view; growth in true leadership; habits of perseverance; acceptable social habits which develop only when children have a chance to mingle naturally in a real social group including older people;

— all of these we see exhibited to some extent in the above reports. We know, too, that these values cannot be secured in a school in which only bookish and scholastic exercises are provided.

QUESTIONS

1. What should be the teacher's part in enterprises such as those described? The pupils' part?
2. Most of these undertakings branched out considerably from the original propositions. Examine them to see if the development seems forced.
3. Which of these enterprises seem best suited to the average school?
4. Is it advisable to attempt to copy such projects? Why?
5. Pick out several features which you consider valuable in the work described and point out the special merits. Which features do you consider of doubtful value?
6. Point out particularly good opportunities in the activities described, for training in good citizenship.

CHAPTER VI

WHAT CONSTITUTES A SOCIALIZED RECITATION?

THERE has been a good deal of discussion in recent years regarding a form of recitation which has been designated as *socialized*. The two terms *social* and *recitation*, with the meanings which they ordinarily connote, do not seem to link up very well. It is necessary to get a conception of a recitation which bears very little relation to the root of the word *recite* before we can conceive of the implied activity as being at all social in its nature. To recite is to state or tell again, and in the old type of recitation the telling again was always at the instance of the teacher and before an audience supposed to know all of the facts just as well as the reciter. The telling again was usually for the purpose of testing or fixing the knowledge of the one reciting; or, in its better form, for the purpose of clarifying the facts under consideration and pointing the way to obtaining more facts. The teacher initiated, directed, controlled the whole movement, asked all the questions, passed judgment on all replies, and dictated what was to follow. This type of recitation was *social* only in the sense that it faithfully represented a certain notion of school society. The new type likewise can be genuine only to the extent that it reflects a fundamentally different school society. The recitation is only one small part of the daily life and experience of the classroom community and it reveals the underlying social theory which controls the school. If a vigilant, autocratic discipline is the general rule, attempting to relax it during certain periods or to dispense with it temporarily will not succeed. The result will be a warring of contrary tendencies and the consequent failure to establish habits and ideals generally applicable beyond the

limits of the particular recitation. It is like trying to reduce a symptom without going to the root of the disease, and the results will be equally unsatisfactory. Such superficial doctoring often produces a class exercise wearing a mask of freedom which is at heart the same old stereotyped, un-liberal thing; or, worse still, what was good in the old is lost and there is substituted a weak, ineffectual, and poorly organized group effort.

Through numerous published articles as well as from observation we have grown familiar of late with some of these spurious forms of the so-called *socialized recitation*. The child critic and questioner is prominent, and the pupils always address each other by name and strew their remarks with "Excuse me"; "I beg your pardon"; "Will you be so kind, John"; and, "Thank you, Miss Jones." Pointless questions and inane remarks get by under the dazzling cloak of drawing-room manners, and robust discussion and criticism languish when the major emphasis is placed upon mere activity and social forms. Common courtesy should be inculcated and should finally prevail in the room, but conventionally polite phrases, the attempt to substitute a child for the teacher, and talk merely for the sake of talking, do not constitute a genuine social activity.

The following is an example of this sort of pseudo-social lesson:

The teacher announced a reading lesson and pupils took copies of *Alice in Wonderland* from their desks. One child (Mary) who had evidently been appointed at a previous lesson, rose and faced the class.

Mary. Where did we leave off in *Alice* yesterday, Tom?

Tom. We left off where the Caucus race was run and the mouse told its long tale to Alice and the other creatures. What chapter was that, Daniel?

Daniel. We finished Chapter III yesterday.

Mary. Daniel, will you please begin?

Daniel. (Announces Chapter IV, page 35, and reads.)

It was the White Rabbit, trotting slowly back again and looking anxiously about as it went, as if it had lost something; and she heard it muttering to itself, "The Duchess! The Duchess! Oh, my dear paws! Oh, my fur and whiskers. She'll get me executed, as sure as ferrets are ferrets! Where *can* I have dropped them, I wonder?" Alice guessed in a moment that it was looking for the fan and the pair of white kid gloves, and she very good-naturedly began hunting about for them, but they were nowhere to be seen — everything seemed to have changed since her swim in the pool, and the great hall, with the glass table and the little door, had vanished completely.

By the time Daniel had reached this point three other children had risen and one of them (Ruth) said:

"Excuse me, Daniel, but you did not pronounce *whiskers* exactly right. Please say *whip*." (Daniel tries.) "Now will you say *why, whistle, whisper*?" (Daniel again makes an effort and apparently satisfies Ruth, who ceases to drill. But he is not to be excused yet, for James takes up the attack.)

James. Daniel, what does *executed* mean?

Daniel. To be killed.

Grace. Daniel, did you notice that *can* is printed in italics? Will you please read that sentence again?

Daniel reads again, "Where *can* I have dropped them, etc.," and emphasizes *can*, to the satisfaction of Grace.

As no further comments are made, Daniel, evidently glad to be relieved, calls on Arthur.

Arthur rises and reads:

Very soon the rabbit noticed Alice as she went hunting about, and called out to her in an angry tone, "Why, Mary Ann, what *are* you doing out here? Run home this moment, and fetch a pair of gloves and a fan! Quick, now!" and Alice was so much frightened that she ran off at once in the direction pointed to, without trying to explain the mistake it had made.

John is now on his feet and as Arthur pauses he questions him:

John. Arthur, can you use another word in place of *fetch*, where the rabbit says, "fetch me a pair of gloves and a fan"?

Arthur. Yes, John, I could say, "bring me a pair of gloves and a fan." Louise, will you please read?

Louise:

"He took me for his housemaid," she said to herself as she ran. "How surprised he'll be when he finds out who I am! But I'd better take him his fan and gloves — that is, if I can find them." As she said this, she came upon a neat little house, on the door of which was a bright brass plate with the name "W. RABBIT" engraved upon it. She went in without knocking, and hurried upstairs, in great fear lest she should meet the real Mary Ann, and be turned out of the house before she (had) found the fan and gloves.

Morris. Louise, will you look at that last sentence again. You left out the word *had*.

Louise. Did I? I'll read it again. (Reads again, putting in all the words.)

And so the lesson continues reaching that deliciously funny scene where the White Rabbit and Pat and poor Bill the Lizard attempt to eject Alice from the tiny house. But not a question was asked or a remark made which tended to bring out more fully points essential to a keener appreciation of the absurd situation, and there was no hearty general laughter at any time during the lesson. No one asked leading, pointed questions calculated to set the others thinking about Alice's relative size at this juncture, what caused her to change in size the last time, why she was in such awe of the rabbit, and what *W* stood for on the door-plate.

In such a lesson the mantle of an exacting teacher has fallen upon the children, and with the same fussiness they take up her supposed obligation to point out with meticulous care all the petty faults and minor errors which occur. About the only difference is that the polite nagging is distributed among a larger number of people instead of being exercised by one. There is nothing genuinely social about this lesson except the delightful story itself with its universal

appeal. But the fine flavor and deep enjoyment of a great literary treasure are sacrificed to a false conception of what constitutes a democratic organization of the group.

[What are some of the essential elements in a truly socialized recitation?]

One of the first requirements is that the subject-matter itself shall have real social worth to the pupils. Poor content, outworn theory, or ideas and facts so remote from child life that the participants cannot link them up with experience can be of no social value to those concerned no matter in what form the exercise is cast. What matter, in a reading lesson, whether child or teacher occupy the leader's chair, or how many pupils volunteer, if the matter is not worth reading? And what is gained by a pupil-directed nature-study lesson if it deal only with isolated facts detached from significant experience? An arithmetic lesson involving examples in which eggs are said to sell at fifteen cents a dozen, butter at twenty cents a pound, and milk at five cents a quart, cannot be *socialized* by any particular mode of conducting it. The statements themselves are false in present-day life, and are therefore fundamentally non-social. Or take the following authentic occurrences: In a school in a remote district where the people were very poor, a class in hygiene was reciting. The children had memorized the statement from their textbook that in sweeping a room wet tea-leaves should be sprinkled over the floor. The visitor knew that in the homes represented tea rarely ever found its way. From the same text another day these pupils quoted the statement that, in case of sudden illness in the family, some one should run to the nearest telephone and call a physician and not attempt home treatment. The nearest telephone was probably fifteen miles distant. The standards of living were very low in the homes of these children, and there was dire need for instruction in hygiene which

would fit, but the material in use was false to the life of the community, and, unmodified, would defeat any attempt at socialization of the recitation, although encouragement of a genuine questioning attitude on the part of the pupils certainly would have caused some child to challenge the statements quoted.

As suggested in the beginning of this chapter, the socialized recitation depends upon a more truly democratic organization of the class even with children of primary-school age. This calls for the establishment of natural, simple, human relations and contacts between the members of the group including children, teacher, supervisor, and principal. The teacher who stands in fear of the displeasure of her supervisor if she depart in the slightest degree from a prescribed procedure will find it impossible to accord anything but a travesty of freedom to her pupils. Cooley¹ calls democratic control "the organized sway of public opinion," and it is through this gradual building-up of public opinion that children arrive at a higher regard for the rights of others and due respect for properly constituted authority. They come to understand that freedom means not liberty to do anything that one pleases, but an enlarged opportunity to *please to do*, or to choose, from among those things which public opinion says are right and desirable. Cooley² also says, "Freedom can be increased only in connection with increase of sympathy, intelligence, and self-control in individuals," and it is the place of the adults in the school community to call these powers into exercise among the children as much as possible, keeping firm control at all times and places where their "instructed conscience" is not equal to the demand. The socialized recitation from this viewpoint involves the highest type of mental and moral discipline and

¹ Cooley, C. H.: *Social Organization*, p. 118.

² Cooley, C. H.: *Human Nature and the Social Order*, chap. xii.

can succeed only in an atmosphere of mutual confidence and active good-will.

So far as pupils are able, they should carry responsibility for contributing materials, ideas, and questions, and for making judgments and assignments, and this responsibility must be real, not make-believe. If an individual or a committee undertake a certain part, the contractor or contractors will be expected to put the thing through without interference and without undue intervention from teacher or classmates. A sturdy independence in individual effort, coupled with a willingness to submit to direction and criticism from others when such are needed, will be the ideal toward which to work.

The more superficial features, such as arrangement of furniture and consequent physical relations of the group, while of minor importance, have a direct bearing upon any attempt at a more sociable type of class-work. The raised platform for the teacher's desk has almost disappeared, but straight rows of desks for pupils all facing that of the teacher still prevail. This arrangement implies a super-authority with the reins of control always in hand and one to whom all remarks and inquiries must be addressed. Some college professors refuse to conduct a course in a classroom having approximately this arrangement. They say they can get no free discussion in such a room, and insist upon having students seated around tables arranged in a hollow square. When this arrangement is obtained, students are never expected to rise when they speak unless they have something to demonstrate, and any other order would be thought stilted and unnatural. For little children it would seem that the least we might ask would be half as many small chairs as there are pupils in the class, these chairs to be taken at times to any open space in the room in order to furnish a grouping more conducive to free intercourse.

As to other minor features, such as rising to speak, raising the hands, addressing each other by name, etc., when the teacher comes down off her elevated platform mentally and spiritually as she has already done physically, it will be seen that any procedure which is proper and efficient in a large family or a small club is all right for a schoolroom, and that no uniform rule can fit all occasions. The idea that there is a certain kind of schoolroom order which should be different from that of all other assembled groups has had a vicious effect. As to the formalities, the manifestations of sincere courtesy and ordinary politeness called for in healthy, refined family life will be the standard, and intercourse will be free from stilted and artificial formulæ.

The socialized recitation demands, of course, a common aim and a specific purpose. Cooley defines society as "an organized body held together by common aims and purposes." If this is true of a great social body, it is equally true of small groups of children. Outside of strict control through adult authority there is nothing that holds children together and causes them to exert something of a united effort except a clear aim and strong purpose of their own, or one which they understand and to which they can respond with genuine interest. It follows that the multiplication of such purposes in the school life of young children will hasten their development in readiness and ability to do good team-work.

And, as a final test, there should from time to time appear as a result of such recitations some clear-cut social outcome extending beyond the classroom. Reading in assembly as a climax to delightful reading hours together; connections set up with the public library; a table in the hall containing continuous display of wild flowers cared for and replenished by a particular class as the culmination of their nature-study work for a season; a number-game made by the children in one class for a lower grade as token of their own mastery of

some unit in arithmetic; or demonstrated ability to run errands for parents and verify change up to a certain amount.

The following record is offered as an example of a class exercise which seems to exemplify to a high degree the characteristics discussed above:

1. The subject-matter has real worth to the pupils.
2. The relation of teacher and pupils and of pupils to each other is natural, simple, and wholesomely stimulating.
3. Pupils as well as teacher exhibit a sense of responsibility for the success of the undertaking.
4. The arrangement of the physical features of the room and the informality of address are conducive to a social feeling.
5. There is suggested at the last an outcome of significance and prolonged worth to the group.

MEETING OF THE BOOK CLUB

Fourth Grade. Horace Mann School. Miss Bess M. Young, Teacher.

Pupils in this class always accomplish a large amount of independent reading. They have a Book Club with the simplest possible organization and the meetings are almost entirely managed by the children. All pupils (with a little well-directed effort) may qualify for membership and at the time the meeting here described took place all members of the class were also members of the club.

The only officer is a president or chairman whose term of office ranges from one to four weeks. There is a class librarian, but he is not a club officer. The librarian is expected to appoint committees from time to time to perform certain duties. The president is elected by the simple process of nominations from the floor to the number of three, followed by a rising vote on these names taken in their order. The one having the largest number of votes is elected. The qualifications of a good chairman have often been discussed, and most of the children are anxious to demonstrate these qualities in order to serve at some time during the year.

The teacher's purposes in encouraging the club are:

1. To stimulate extensive reading of a variety of good books.
2. To aid in developing a discriminating taste.
3. To stimulate the weaker children to work hard on other reading exercises in order to be eligible for membership.
4. To provide a very vital situation calling for a certain amount of audience reading.
5. To provide occasions for good organization of "speeches" and good delivery of the same. (Oral English.)

The children's main satisfactions seem to be found:

1. In the pleasure derived from a club organization with its attendant business.
2. In getting practical suggestions for selection of books for their personal libraries.
3. In the opportunity to borrow books.
4. In delivering their speeches and listening to entertaining reading.
5. In seeing the classroom library grow partly through their own effort.

The writer attended a club meeting in February, 1924, at which time the children were endeavoring to "take stock" as to what they had read the first half-year. They reported books read, gave some estimate of favorite books, recommended certain ones to the entire class and others to particular classmates, and engaged to pick out five books which they felt every child in the class should read during the year.

The children took their places at the front of the room occupying chairs arranged in a close circle. The teacher sat with the children and the president stood most of the time.

George F. (the president, addressing the librarian): "Jimmie, do you want to say anything about the library?"

Jimmie: "Yes, I think some people are careless about putting labels back on when they come off. And maybe we could find a better way to make out our slips."

George F.: "I want to suggest that when a label comes off a book, you take a little paste or glue and stick it back on. It will make a lot of trouble if you don't."

Several children began to talk at once and the chairman called them to order. He then recognized Dick and gave him the floor.

Dick: "Don't you think it would be a good idea to write the numbers inside the books?"

(This proposition was discussed; there was a difference of opinion; Miss Young spoke of the advantages of the plan; a boy called "Question"; and it was voted by a showing of hands to put numbers inside books, in pencil.)

Audrey: "I'd like to know if we are going to have committees appointed."

Miss Young: "Jack will attend to that matter later."

George F.: "In order to make a choice list, we must know which books you have read you like the very best. If you recommend a book for everybody to read, Miss Young is going to write the name of it on the blackboard. Who is ready to report? — Nat."

Nat: "The best book I've read lately is by Leander Keyser. It's called *Our Bird Comrades*. He told how to tell the birds by their color and shape. He told not only about birds' habits, but about his own interesting experiences with birds."

Miss Young: "Would that book be interesting to every one in the class?"

Nat: "To those that are fond of nature, it would."

Billy: "I've just finished *The Quest of the Golden Fleece*, by Padraic Colum. Among the other stories is a fine one which I especially liked about how Theseus killed the Minotaur. Any one that likes Greek stories will like this book, I'm sure."

George F.: "Billy, do you recommend that book for the whole class?"

Billy: "Yes, I do."

(Miss Young wrote title on blackboard.)

Boykie: "I've been reading a book of Greek stories too. It's Kingsley's *Greek Heroes* — all about Perseus and the Argonauts, and Theseus. I think it's fine and I recommend it to every one who likes exciting stories. I know the boys will enjoy it."

* (Miss Young added this title.)

Audrey: "A book that I like very much is Scudder's *Book of Legends*. I chose it because it has a number of short stories and I wanted to find something good to read out loud. I think Jimmie and John and Dick would like it."

George F.: "Is any one else ready to report? — Eleanor."

Eleanor: "I enjoyed *Sarah Crewe* more than any other book I've read this year."

(Eleanor gave a brief account of certain incidents she especially liked.)

Miss Young: "Some other people have been reading *Sarah Crewe*. Perhaps they might like to say something about it."

(The chairman then called on Jacqueline, who added other interesting points.)

Jimmie: "The book I like best of all is Pyle's *King Arthur*. I think everybody would like it. It's about kings and knights and ladies in old England. Some of the class might not be able to read it this year. It isn't easy reading."

Dick: "When did the author live? I mean is he living now?"

A short discussion followed about new versions or new editions of old tales. Miss Young joined in this and the children mentioned several examples, such as *Robinson Crusoe* (Baldwin edition) and various editions of *Robin Hood*.

Jacqueline: "I want to recommend *Robin Hood*. I think every one would like it, especially any one who likes stories of long ago."

Eleanor: "When I was out of school I read *Little Lord Fauntleroy*. That is, I read part of it and my mother read part of it to me. I didn't like the grandfather very much, because he didn't treat Cedric and his mother very well, but in the end he wasn't so bad."

George N.: "There is something else interesting about *Lord Fauntleroy*; that is, his visits to Mr. Hobbs and their amusing talk."

Jack: "One of the most entertaining books I ever read is *Dr. Dolittle's Post-Office*. I like his imaginary words, and it's so exciting all the time to see what is going to happen."

George F.: "That place in *Dr. Dolittle* about trying to shave with-

out any water is funny. The mice run around trying to bring water in nutshells. There are a lot of other amusing things, too."

Miss Young (to the president): "You have just three minutes left."

Alice: "I move we vote for the next president."

George F.: "Are there any nominations?"

A new president (Boykie) was duly elected, and he then proceeded to name a committee of four who were to make special preparation for a short oral reading period the next week.

Miss Young: "May I make a suggestion? Shall we try now to make a list of five books which we think every person in the class should read before the end of the year? Let us take that as a question to report on Monday."

Examination of the lists brought in by the class the following Monday shows the following recommendations. Titles mentioned by less than four children are omitted:

Four votes

Robin Hood. Howard Pyle.

Five votes each

The Quest of the Golden Fleece. Padraic Colum.

Little Lord Fauntleroy. Frances H. Burnett.

The Little Lame Prince. Dinah Mulock Craik.

The Story of Dr. Dolittle. Hugh Lofting.

Six votes each

Heidi. Johanna Spyri.

Dr. Dolittle's Post-Office. Hugh Lofting.

Seven votes

The Voyages of Dr. Dolittle. Hugh Lofting.

Nine votes

The Burgess Books. (No particular title specified.)

Ten votes

Alice in Wonderland. Lewis Carroll.

Later in the term these children will be asked to judge again which of all the books they have read during the year should be marked (double-starred) as the finest and best for the fourth grade in their own school. Their judgments and those of teachers and specialists will form the basis for selecting about twelve choice books which all will be expected to read in this grade.

QUESTIONS

1. In what respects does the reading exercise first described fail to realize high social values? Show how the reading of *Alice in Wonderland* could be made a truly social experience.
2. Point out some desirable social features in the second exercise described.
3. How may helpful and reasonable standards for the social organization of the school be derived? In what respects should they be similar to those in a good home? In what respects will details be different?

CHAPTER VII

COMMAND OF ORAL ENGLISH REQUIRES ITS ABUNDANT USE AS A SOCIAL INSTRUMENT

THERE is no subject in the curriculum more obviously social in intent and in possible content than the study of the mother tongue or the tongue of one's adopted country. The uses of reading, writing, and arithmetic are more delayed in the lives of children, and therefore are not so apparent. In consequence, much skill is required on the part of teachers to launch these subjects successfully and secure effective impetus for their pursuit; whereas most children, far from being beginners, are already quite advanced in speech control even when they start to kindergarten, since they have been making free and successful use of the art for some years. Influences offering strong impetus and direction to the further development and refinement of this art lie close at hand and teachers must go out of their way to avoid or nullify them. Children have had an enormous amount of practice in the art of language during the pre-school period, beginning in the cradle with cooing and babbling -- the instinctive vocal play of infancy. They have benefited by much unconscious teaching, and perhaps most of those born of native parents have had some more or less direct help in the uses and forms of English speech as applied to everyday life.

HOW DOES LANGUAGE POWER GROW IN THE PRE-SCHOOL PERIOD?

Few of us stop to think how extensive is this acquisition on the part of normal children from average American homes by the time they are five or six years old, nor have we given very much thought to the contributing factors in the truly

remarkable progress in language ability which most of them have made before starting to school. The facts connected with this successful *learning* ought to convey helpful implications regarding successful *teaching* through the more conscious processes of the school.

We have available for this use numerous carefully made and exhaustive studies of the language abilities of individual children, and several of these indicate clearly some of the dominant factors in the learning process.

One interesting phase of the subject is the sheer *quantity* of talk on the part of young children in the home. The actual count of this flow of speech is rather startling even to people who have lived very close to small chatters. Brandenburg¹ reports the number of different words used by his three-year-old daughter in one day as 859; total number of words uttered by her in that day, 11,623; number of sentences, 1873; number of interrogative sentences, 345. He says:

If any one has any doubts as to the social tendency in children or its importance as a factor in language development, the number of words uttered in a day by a normal child ought to be fairly convincing. G—— spoke, during this day of twelve hours and fifteen minutes, approximately nine hundred and fifty words per hour.

Other features worth noting are the very extensive vocabularies acquired by many young children and the situations which seem to favor such acquisition. In a study of the language ability of a precocious little girl, Mildred Langenbeck² says that she had a vocabulary of 6837 words at the age of five years. The list of words used was compiled from her unaided talk, "gathered chiefly while she played

¹ Brandenburg, G. C.: "The Language of a Three-Year-Old Child"; in *Ped. Sem.*, vol. 22, p. 94.

² Langenbeck, M.: "The Study of a Five-Year-Old Child"; in *Ped. Sem.*, vol. 22.

alone, talking incessantly to herself, to her dolls, and to imaginary companions." Further on in the article the writer says, "She is never content until she knows the exact name for every new thing and its every part."

The marked and immediate influence of environment and first-hand experience upon a child's vocabulary is shown by a study made by Margaret M. Nice.¹ The little girl she observed had a rich out-of-door life, and after reaching the age of about four years a very large percentage of new words acquired by her have to do with experiences relating to plants, animals, landscape, sky, etc. The writer says:

Words may have very different concepts behind them according to one's experience. A child who gets his language mainly from conversation with his elders, from playing with toys or looking at books and listening to stories has a less vivid foundation for his words than the child who lives with realities, with animals, plants and other children and has an opportunity to do things himself.

Other studies have been made of the dominating motives which impel effort in learning to talk. Bohn² believes his child was more influenced by the desire for social relations and not so much by personal needs or the "sharp demand made by immediate environment." He says:

As time went on, words were used more and more to establish with those about her a common basis of understanding and enjoyment. . . .

It seems to me as clear as anything can be in this uncertain realm that the child exerts ear and eye and vocal organs in order that it may enter into the social life of the wonderful giants with whom it lives.

From such studies, as well as from our own less methodi-

¹ Nice, M. M.: "The Development of a Child's Vocabulary in Relation to Environment"; in *Ped. Sem.*, vol. 22, p. 36.

² Bohn, William E.: "First Steps in Verbal Expression"; in *Ped. Sem.*, vol. 21, p. 587.

cal and complete observations of children in the free life of the home, we can readily see that all of the laws governing the formation of habits have been strongly operative in building up language ability in the pre-school period!

Abundant *exercise* is the most conspicuous element in the process. Children talk incessantly unless silence is imposed, and the impulse toward verbal expression is so strong that powerful counter-forces are usually necessary to induce inhibition in a healthy, wide-awake child, as all who are acquainted with children can testify. Original nature gives such a powerful "set" or "drive" toward speech that mere exercise of the power gives satisfaction, and repression causes annoyance or distress. After the earliest vocal play, the child uses speech in order to enter into more intimate relations with those about him and to fulfill his desires and accomplish his practical purposes. As these are the most fundamental and universal uses of language, the exercise he is getting is of a kind calculated to set up the bonds or connections most directly required in life. The force of the "drive" toward adequate and effective speech is augmented if adults really misunderstand a child's imperfect speech, or if they are disposed to withhold what is desired until he has done his best to express himself verbally. Thus the law of *effect* is constantly operative. This law says that responses which bring pleasure or satisfaction are more likely to recur than those which are accompanied by dissatisfaction or annoyance. Therefore steady improvement is made through effort to realize desired ends and in response to the manifested approval and disapproval of older people.

Breadth of experience as well as abundant practice of the right kind is shown to be very important in developing language ability. Every new object calls for a name and for descriptive words; every new situation and relation carries with it appropriate verbal connections. It is a fact so well



FIG. 15. CORNER OF FIRST-GRADE ROOM, HORACE MANN SCHOOL,
DURING QUIET WORK TIME

In background, stage built of Hill floor blocks, curtain made and decorated by children
A play is to be given soon for the mothers.

known as scarcely to need mention that children who are in constant association with superior grown people, and who therefore see, experience, and talk about things and events which would not ordinarily be in their range, usually develop rapidly in verbal expression; and the meager language equipment and mute condition of little ones who have lived long in an orphanage of the old type have been often remarked. These little prisoners have not seen, felt, touched, tasted, heard, or thought one tenth as much as have their more favored brothers and sisters, and of the impoverished life which surrounds them they are silent, dull witnesses rather than responsible and responsive participants. In the latter case, too, the absence of close personal contact with superior adults involves, of course, an immeasurable loss.

As Dewey¹ has pointed out, few people can be fluent regarding things and processes to which they are relative

¹ Dewey, J. W.: *How We Think*, chap. xiii, p. 181.

strangers; and even the notoriously voluble and shallow person usually has to yield the floor to the acknowledged expert in a given line. My friend has a new electric washing machine which she displays to me, and which seems interesting and rather simple. I go home after seeing it and try to tell my family about it, with rather poor success. I did not see it in operation, much less did I handle it, and I find I cannot command the language needed for description because I am not really acquainted with the machine. My friend comes in another day, and, because she has operated it successfully, knows all the parts and their functions, and is enthusiastic about her new acquisition, she interests and satisfies every one who hears her tell of it.

My eight-year-old neighbor can talk much more effectively and entertainingly about airplanes than I can. Through his lively interest in everything pertaining to aviation, visits to aérodromes, talks with mechanicians and aviators, and examination of every illustration and design he sees, he has a knowledge of the subject and a command of the required nomenclature and terminology far superior to mine.

This natural, spontaneous use of language for genuine and immediate social and practical purposes results in an ability which functions readily in varied situations, provided adequate means are used to improve standards. There is no substitute for this sort of exercise.

WHAT HAS THE SCHOOL OFFERED AS A SUBSTITUTE?

History shows that Pestalozzi, Froebel, and many of their successors in the kindergarten and primary school, as well as Madame Montessori, the latest propounder of a system of childhood education, have all tried to build up language ability through a more formal methodology. The old type of kindergarten emphasized the importance of having young children acquire such terms as *sphere*, *cylinder*, *cube*, *cone*,

corner, angle, edge, triangle, circle, obtuse, etc. As terms used in strictly dictated directions for placing blocks and folding paper, an artificial importance was attached to them in the kindergarten, but they sank into relative insignificance and disuse in life outside of school. Tiny children, who could not tell their father's name or distinguish between such common words as *plate* and *saucer*, were drilled in mathematical terms through what was called play. In justice to the old-fashioned kindergarten, it should be said, however, that through excursions, conversation, stories, pictures, and the introduction of many concrete experiences of value, a more effective and serviceable training in language was going on at the same time.

In the interests of an enlarged and supposedly workable vocabulary, Madame Montessori¹ likewise urges that a considerable number of the terms connected with her very extensive geometrical apparatus be taught to quite young children. She says:

When the child shows that he can with security distinguish between the forms of the plane geometric insets, the directress may begin the lessons in nomenclature. She should begin with two strongly contrasted forms, as the square and the circle, and should follow the usual method, using the three periods of Seguin. We do not teach all the names relative to the geometric figures, giving only those of the most familiar forms, such as square, circle, rectangle, triangle, oval. . . .

Why should we consider it premature to teach the child the words *circle, square, oval*, when in his home he repeatedly hears the word *round* used in connection with plates, etc.? He will hear his parents speak of the *square* table, the *oval* table, etc., and these words in common use will remain for a long time confused in his mind and in his speech if we do not interpose such help as that we give in the teaching of forms.

The children in the neighborhood of the school for which this recommendation was made will have very little use for

¹ Montessori, Maria: *The Montessori Method*, pp. 234-37. F. A. Stokes.

the terms *oval*, *rectangle*, *triangle*, etc., for many years to come, and argument for teaching geometrical terms cannot be soundly based on the claim that such knowledge is needed to save young children from embarrassment and confusion when their elders are talking. [A vocabulary of this sort is of very small importance as compared with one evolved from or connected with vital environmental experience.] In fairness to Montessori's entire scheme, it should be said that provision is made for a good deal of oral expression in other and more vital connections.

The American primary school has shown a decided tendency to neglect the functional use of language in favor of formal drill. Ample evidence of this will be given in the next chapter. The earlier nature-study work was replete with attempts to teach the distinctive meanings of such words as *opaque*, *translucent*, *truncated*, *dentate*, *serrate*, etc., in connection with observations of isolated objects. Such lessons were inspired by the fallacy that one could by such means develop in the children a general power of observation and at the same time increase their active vocabulary. Beyond the lessons in which such words were taught, it is probable that the children did not employ them in oral speech until many years later, if at all. The rapidity and certainty with which the average person incorporates technical terms into his active vocabulary depend upon the vigor with which they were first impressed upon him and the frequency with which situations arise where he cannot conveniently avoid their use. I was grown before I felt absolutely certain of the distinction between *warp* and *woof*. Little children who are weaving soon apply these terms as readily and correctly as they do *blue* and *red*. The boy possessor of an electric battery quickly learns the difference between *positive* and *negative* in that connection, and children well prepared to stage an Indian play do not call a *tepee* an

igloo. The vocabulary of the normal child will grow just as rapidly as vital situations are presented in which participation requires that he learn to employ new terms with precision and accuracy. In this connection, printed matter and pictures are better than nothing, but they are a poor substitute for overt action, first-hand experience, and associated, purposeful speech.

WHAT MAY BE EXPECTED FROM THE USE OF LANGUAGE GAMES?

Much dependence is being placed upon so-called "language games" to establish certain desired speech habits. Reports from hundreds of primary teachers and examination of many textbooks, manuscripts, and magazine articles go to prove how popular is this mode of language teaching. Such exercises always call for much repetition of some phrase, sentence, or part of speech, and effort is made to give such practice a playful form in order to arouse and hold attention. Responses are often called for in chorus, and these games seldom demand a high degree of consciousness on the part of the children. At their worst, the effect of the mere unthinking repetition required is almost hypnotic. Reliance on drill of this kind assuredly counts too much upon one factor alone in the law of exercise — that of sheer repetition, and not enough upon the equally important correlative requirements that this repetition shall set up the right bonds or neurone connections and in the right order.

Examination and tests of these games show that many of them are calculated to set up bonds (build habits) which will never operate outside the particular class exercise under consideration. Others are of such nature that if by any miracle of psychological experience the speech habits aimed at should transfer over to everyday life, listeners would gaze at the speaker so trained as one from a strange and foreign

land where English had undergone weird transformations. The following example illustrates both of these points:

To teach *It is I, It is not I.* Game for first and second grade.

Teacher. "Let us play we are going to have a party. Shall we get the refreshments ready? We ought to try to have things that every one likes."

Teacher. "Who is it that likes chocolate cake?"

The children answer in concert according to their taste, "It is I"; or, "It is not I."

Teacher. "Who is it that likes oranges?"

Again children reply in concert, "It is I"; "It is not I."

Other items are presented by the teacher in the same manner.

Then the time for serving the imaginary refreshments arrives.

Teacher. "Who is it that wishes chocolate cake?"

Children reply, "It is I"; "It is not I."

Each item is "served" in the same way until the teacher declares that the party is over.

The situation around which this exercise is built is so unlike any natural life experience that there is not the slightest chance that the form "It is I" will transfer over, even though the children repeat the expression in this game a thousand times. And if it *should* carry over, how aghast we should be at the result! Does the host say to guests at his table, "Who is it that likes the white meat?" "Who is it that likes the dark meat?" And do the guests reply, "It is I"; "It is not I"?

The phrases are perhaps grammatically correct, but they are socially entirely incorrect and absurd in the setting given. Yet the only possible occasion for their use would be social, and even this exercise attempts vainly to give a social setting. Such attempts are like sharpening a poor

tool which will never be used, instead of treating language as a genuine social instrument to be employed so often, so naturally, and in such varied situations in school as to be made ready and adequate for expanding uses outside of school.

Another game intended to make habitual the phrase "It is I" is conducted as follows: One child in the room closes his eyes. Another child, silently chosen, leaves the room and shuts the door. He then raps on the door, and the one whose eyes are closed calls out, "Who is there?" The other is expected to reply, "It is I." Question and answer are repeated until the listening child judges from the voice who is rapping. As sometimes played, a wrong guess, as, for example, *Charles*, brings the response in chorus from the rest of the class, "No, it isn't Charles"; or, if the teacher wishes small children to be prigs in the use of English, she tries to train them to say, "No, it is not he."

This play situation is much more like real life than the first described, the usage employed (exclusive of the last alternative phrase cited) is more like the common speech of educated people about us, and therefore the chances are better that such drill will tend to establish connections which will be "touched off" and bring the desired response should a similar situation naturally arise. But what is the relative importance of forming the habit of saying "It is I," "It is not I," at this age as compared with other speech habits? A considerable number of primary pupils in the schools of this country are at a stage where really gross errors are common among them, yet through such exercises as those described they are being drilled on refinements of speech involving delicate distinctions between *shall* and *will*, *should* and *would*, and the fixation of a usage so infrequently called for as, "*If it should not be they.*"

Many of these devices employ terms so unnatural, so un-

common, that extensive preliminary drill on the required forms is necessary before children can be counted upon to respond according to the rules of the "game." Perfectly correct and generally acceptable phrases must be suppressed because they do not happen to be the forms demanded in a given exercise. In other words, pupils must be drilled upon how to go through a certain drill. The "party" lesson illustrates this point. Another example is found in the exercise sometimes called *The Fairy's Touch*. One child is chosen to be the "fairy." The others close their eyes. The "fairy" runs lightly about the room touching other children here and there. At a signal, eyes are opened, and one of the number questions thus: "James, was it you the fairy touched?" James must reply, "No, it was not I"; or, "Yes, it was I." As usually performed, this question is put to every child in the class until all have answered. The natural query would be, "James, did the fairy touch you?" and the commonly accepted reply would be, either "No, Mary"; "No, Miss Brown"; or, "No, she didn't touch me." But if these forms were permitted, the desired practice would be defeated; therefore, they must be suppressed.

If children must learn to suppress perfectly correct as well as grossly incorrect forms of speech, when and how are they to learn the difference? May not this sort of suppression and substitution retard rather than aid in the development of ready, natural, and pleasing speech in everyday life?

Honest answers based upon thoughtful consideration of the following questions would prevent much of this sort of waste in time and energy:

1. Considering the maturity and advancement of these particular children, is the error involved a glaring one?
2. Is the substitute form socially as well as grammatically correct?
3. Is the substitute form stilted and bookish or is it good idiomatic English?

4. Is the correspondence between the drill situation and daily life sufficiently close to warrant belief that the habit formed will come into play in real conversation and genuine expression of ideas?
5. Could the habit be established more economically and surely by increasing the opportunities for purposeful, natural use of language combined with friendly criticism?

VARIETY IN PRACTICE IS NEEDED

Practice in oral English should be as varied as possible because life's uses are varied. We speak of certain individuals as "natural-born talkers," and it is true that individual differences are great in this ability as in all others, but two people having apparently equal verbal facility may not acquit themselves equally well in like situations. To a considerable extent, mastery in this realm as elsewhere is specific. One may be a good soap-box orator and a poor conversationalist at a dinner party, and *vice versa*. On this point O'Shea¹ makes an apt and forcible statement when he says, "A man is effective linguistically in those situations and only those in which he has often been placed, in reaction upon which he has been constantly urged by force of circumstances, to express himself readily and to the point."

In the light of this principle, we should be careful not to overwork or put too great reliance upon story-reproduction, dramatization, or any other single means of securing practice in speaking, no matter how admirable the exercise may seem in itself. It is certain to be one-sided and inadequate for training in pleasing, and childlike speech in the many and varied occasions which daily life presents. Memorization of a story *verbatim* and its subsequent reproduction are less likely to influence a child's speech habits than is the frequent telling of the story for pleasure, without exact memorization,

¹ M. V. O'Shea: *Linguistic Development and Education*, p. 234. The Macmillan Co.



FIG. 16. FIRST SCENE IN THE PLAY, "FAIRYFOOT," TRAINING SCHOOL SAN JOSÉ STATE TEACHERS COLLEGE
The play was adapted by the children of the First, Second, and Third Grades from a story by Frances Browne. This scene, "In the Palace Home of Fairyfoot in Stumpingame," was developed and acted by the Second Grade.

but with the aid of sympathetic criticism. It is in summoning ideas, arranging and organizing them, and finding suitable words in which to express them that the fullest exercise consists.

The only way to secure practice in oral English which will be adequate from the standpoint of quantity, variety, and conformity to correct and natural usage is to have the work of the class and the school so arranged that there shall be ample opportunity for free expression in connection with all kinds of interesting and intrinsically valuable activities. Things must be going on that are worth talking about, and to this end the school must help to establish wider contacts with the best which the environment offers. Pupils will discuss with the teacher plans for group projects of all kinds. Committees will meet and report regarding various undertakings, such as dramatic performances, proposed assembly participation, or club affairs. They will compose "speeches" and practice them for more formal occasions, such as acting as emissaries to other rooms to make announcements or extend invitations, making reports on interesting experiences which all have not enjoyed, or imparting needed information. They will prepare dialogues for puppet shows, and will talk freely about what they read. Nothing can take the place of such informal and semi-formal intercourse. School life of this type approximates in linguistic opportunity a full, rich, natural community life, and offers in addition the aid of an alert teacher ready to note the stage of progress attained by the pupils and competent to help them to improve. In what other way can she really know their language needs and furnish the necessary assistance?

When the teacher has discovered that certain incorrect forms are common, the children can be made conscious of them by degrees, and then some drill exercises (perhaps at times a few of the best language games) may be used with

good effect. Children will work hard and in fine spirit to eliminate certain errors if the general atmosphere of the room is encouraging and if there are many occasions where they are ambitious to speak well. Successful teachers work on a few of the most serious and most common errors at a time. A definite goal is set to eliminate certain errors in a given year. In some localities, a first- or second-grade teacher might feel well content if, out of a multitude of gross mistakes, the majority of her pupils learn to avoid *ain't*, *I seen*, *have saw*, and *we was*. An inspiring and fun-loving teacher can enlist the effort of her class by making an informal and casual game out of "Shutting the schoolroom door on *Ain't*." "Let's see if we can keep him out of our room this week." "Did *Ain't* get in?" "Who let him in?" "He will follow you to school as long as you will allow him to," etc. Good-natured checking of this kind continues, but is never allowed to become nagging. The spirit of good-fellowship and coöperation must be maintained. One after another, other "ragged fellows," *I seen*, *We was*, etc., are dealt with and not allowed to show their heads.

Have not the more sympathetic teachers of young children been too afraid of introducing the conscious element in correction? There has been a disposition on their part to depend almost entirely on indirect correction and unconscious imitation. The latter methods can hardly be relied upon to break up a fixed habit which outside influences tend constantly to deepen. Conscious effort and well-directed desire must come in as factors at some stage. May they not be used to advantage as early as first grade?

OVER-PEDANTIC REQUIREMENTS DEFEAT MORE IMPORTANT ENDS

The propriety of any given response should be determined by the situation and not by arbitrary edict. To say that

children should always speak in complete sentences is to say that they should speak in a manner different from that which is habitual among educated adults. In discussing this question with classes composed of primary teachers and school principals, the writer has frequently found them using incomplete sentences in the very act of arguing that young pupils should not be permitted to do so. The pedantry of the demand when applied to all schoolroom situations will be seen if one listens to ordinary, polite interchange among acquaintances or reads the conversation in a well-written modern novel or play. To require that children shall always rise, step into the aisle, take a certain posture, and refrain from touching any object while speaking is, again, to lay down strictures which would kill any meeting of adults assembled for interchange of ideas. Members of college classes in Primary Education have been known to insist upon such regulations for children, themselves carrying on the argument while comfortably seated. Why make a fetish in school of forms which elsewhere in life are merely made to serve a useful purpose?

[This does not mean that slipshod, careless, inadequate expression, slouchy posture, and discourteous demeanor should be allowed to pass unnoticed and become habitual. The virtue of the complete sentence is that it conveys a complete meaning to some one who is listening. The incomplete sentence does not always do this. Except in lively and intimate interchange, complete sentences will usually be needed in order to make one's meaning clear. The social situation should determine posture also. A certain position when addressing others fits one occasion and does not fit another. The wise teacher leads the children to see this early in the year, and helps them to make habitual those responses which contribute best to the pleasure, comfort, and profit of all.

Many of the improvements widely advocated to-day for the primary school have to wait on appropriations for furniture, materials, reduced number of pupils per teacher, increased space, or other physical changes beyond the control of principal or teacher. But a fair approximation of the purposeful work in language here suggested can be attained in *any* school where conditions are halfway right. For the children have their tongues. They are also endowed by nature with curiosity, with inquiring minds, so that speakers and audience are always ready for anything that appeals to childish interest. A school that is at all alive calls for much discussion of worth-while things. The activities may of necessity be more meager, less suggestive, than could be desired while we await more generous provision for the lower grades, but purposeful, varied, and eager expression through language can nevertheless be abundantly called forth unless the teacher is bound to a different course by oppressive authority.

QUESTIONS

1. What are some of the factors that influence the growth of language in the pre-school period? Compare with these the opportunities for language growth in the case of institution children.
2. Discuss the methods used by the old-fashioned kindergarten to enlarge the child's vocabulary.
3. What specific conditions may the school furnish which will favor growth in language?
4. Why do the so-called "language games" fail to establish certain required speech habits?
5. What should be the basis upon which the teacher selects the particular errors to be worked upon?
6. What are some of the requirements often insisted upon during the oral English periods that are not used outside of school? In a given classroom what should determine the form of procedure?

CHAPTER VIII

TO WHAT EXTENT IS ORAL LANGUAGE ALLOWED TO FUNCTION IN PRIMARY GRADES?

THE function of language is to enable us to communicate for practical and social ends. In theory our schools have largely accepted this social viewpoint as regards the mastery of language. We have been told for many years that it is the duty of the primary school to make the language work function in the daily life of the children; that the best way to make growth more certain and rapid is to provide abundant opportunity for natural, easy speech. The following passages, taken almost at random from courses of study of ten or a dozen cities, show the prevalent theory.

Teachers in primary grades should seek to create the language environment of a cultivated home.

The mechanics of language should be subordinated to the pupil's thought and feeling.

The chief object of the language work of the first grade is to train the pupils to talk freely and connectedly about things and events that enter into their lives.

A part of the language work should consist of simple conversations which should be as free as possible.

One of the aims of oral instruction and language is free expression.

The language of the first grade should be largely oral and pupils should be encouraged to talk freely.

Provide a natural social atmosphere and encourage the children to talk freely about affairs that interest them.

An investigation made in 1916-17¹ shows common prac-

¹ Moore, Annie E.: "A Quantitative Study of Oral English in the Primary Grades"; in *Teachers College Record*, May, 1919.

tice greatly at variance with this theory. Visits, lasting from two to three hours each, were made in one hundred and twenty-seven different first-grade classrooms in twelve cities widely distributed over the country, for the purpose of finding out just what sort of language work was going on in representative schools. The specific question was, "To what extent is free oral expression permitted in the lower grades?" The term "free" was not meant to cover mere chatter at rest periods, intermissions, etc. It was intended to designate the natural, purposeful use of language distinguished from set exercise or formal drill as it occurred during the regular program. The observers were seeking oral expression which appeared to measure up to the standards presented in the courses of study just quoted. These quotations are taken from published curricula of the schools investigated.

The only types of oral expression excluded from the count were: Reading, when carried on without discussion or comment; memorized selections; dramatization, when *exact* words of text were required; phonic work and drill exercises demanding exact phraseology. Some of the types sought and recorded as "free" were: Class discussion; natural conversation about subjects of interest; dramatization in which pupils had some opportunity to shape the dialogue; story reproduction as distinguished from pure memorization; and any spontaneous remarks or questions of pupils in relation to various activities.

It was at first intended to have extensive observations made in the first three grades, but not enough assistance could be secured to accomplish this, so it was decided to observe in first grades only. It was thought that the policy governing upper primary was not likely to be more liberal than that controlling the youngest children — recent entrants from kindergarten and home.

Some of the most striking discoveries briefly stated were as follows:

In City No. 11, nineteen and a half hours were spent in ten classrooms, about two hours in each room. In all this time, only five minutes were occupied by oral expression which could by the most liberal interpretation be called free and natural. With this exception all the time in all the rooms visited was devoted to exercises in which the children were required to speak in a rigidly limited manner or to be absolutely silent.

In another city, twenty-nine hours spent in thirteen rooms discovered a total of thirty-three minutes of free expression.

The most liberal practice in this regard was found in City No. 10, where about sixteen hours spent in eight rooms showed the children engaged in activities permitting spontaneous, natural expression two and three quarters hours, or seventeen and a half per cent of the time. Tables III, IV, and V show the full results of observations in three different cities. Table III gives the facts for City No. 11, where the least free expression was found; Table IV shows City No. 10, which permitted the greatest amount; and Table V shows City No. 2, which represents the median for the twelve cities studied.

The full report ¹ gives the distribution of 127 observations in as many different classrooms according to the amount of free oral expression found in each. It shows that in 39 rooms there was absolutely no such use of language; in 37 rooms it occupied 5 minutes or less. Putting these two groups together, we see that in 76 out of 127 rooms there were 5 minutes or less of such exercise during the hours of observation. The median time devoted to this type of expression in all rooms visited was less than 5 minutes out of 2 hours plus.

¹ *Teachers College Record*, May, 1919, p. 272.

TABLE III—CITY NO. 11

ROOMS VISITED	PUPILS PRESENT	LENGTH OF OBSERVATION (in hours)	FREE ORAL EXPRESSION (in minutes)	NUMBER OF PUPILS WHO SPOKE
a	33	2 $\frac{1}{2}$	1	3
b	35	2	1	3
c	30	2	$\frac{1}{2}$	4
d	42	2	0	0
e	30	2	0	0
f	36	1 $\frac{1}{4}$	1	4
g	39	1 $\frac{1}{4}$	$\frac{1}{2}$	2
h	40	2	1	6
i	31	1 $\frac{1}{4}$	0	0
j	37	1 $\frac{1}{4}$	0	0
Totals	10	353	19 $\frac{1}{2}$	22

a Two fifths of one per cent of total observation time.

Explanation. Ten rooms visited; 353 children observed; total time spent in 10 rooms, 19 $\frac{1}{2}$ hours. In all, 5 minutes were given to "free, oral expression," which is two fifths of one per cent of all observation time. In the 10 rooms combined, a total of 22 children spoke in the manner described. In this city the first-grade children in schools visited may be said to have been entirely silent except in formal drill.

This investigation was made about seven years ago. More recent but much less extensive visits give evidence that practice is becoming more liberal in several of these cities. In others, where the general level is still very low, individual schools are following a much more liberal policy. There is good reason to believe that in at least five of the cities concerned, there are to-day, just as at this earlier date, thousands of young children who are quite mute in school except when they read orally or reply with great brevity in some stereotyped drill lesson.

That the restriction is not necessarily due to large classes may be seen from Table VI. This gives the average number

THE PRIMARY SCHOOL

TABLE IV—CITY No. 10

ROOMS VISITED	PUPILS PRESENT	LENGTH OF OBSERVATION (in hours)	FREE ORAL EXPRESSION (in minutes)	NUMBER OF PUPILS WHO SPOKE
a	24	2	25	12
b	36	2	15	15
c	26	2	30	18
d	31	2	20	15
e	30	1 $\frac{3}{4}$	30	20
f	32	2	30	20
g	37	2	10	30
h	42	2	5	7
Totals	8	15 $\frac{3}{4}$	165 ^a	137

^a Two and three quarters hours, or 17.5 per cent of total observation time.

Explanation. Eight rooms visited; 258 children observed; total time spent in 8 rooms, 15 hours, 45 minutes. To free oral expression, 165 minutes, or 2 hours, 45 minutes, were given, which is 17.5 per cent of the observation time. This is the highest percentage of time given to this type of expression in any of the cities studied.

of children present in the twelve cities studied and the percentage of time in each devoted to natural, purposive speech.

It will be seen that City No. 1, with an average attendance of 43, does better in the matter concerned than City No. 6 with an average of 33, and far better than City No. 11 with an average of 35. Compare also cities No. 3 and No. 9. The average attendance in the two is the same — 38. In No. 3, two per cent of time is used for "applied" language, and in No. 9, fourteen per cent of time is used in this way.

Those who conducted this investigation found abundant proof that different practices were the result of different conceptions of education. It was evident that a certain policy controlled in any given system. In some there was a "conspiracy of silence." Children were evidently expected to

TABLE V—CITY No. 2

ROOMS VISITED	PUPILS PRESENT	LENGTH OF OBSERVATION (in hours)	FREE ORAL EXPRESSION (in minutes)	NUMBER OF PUPILS WHO SPOKE
a	33	2 $\frac{1}{4}$	0	0
b	18	3	0	0
c	21	3	30	15
d	25	3 $\frac{1}{2}$	0	0
e	21	2	15	10
f	40	2	15	18
g	40	4 $\frac{1}{2}$	0	0
h	32	3 $\frac{1}{2}$	0	0
i	36	1 $\frac{1}{2}$	5	8
j	40	1 $\frac{1}{2}$	0	0
k	34	1	10	11
l	32	2	20	9
m	39	2 $\frac{1}{2}$	0	0
Totals	13	411	31 $\frac{1}{2}$	95 ^a

^a One hour 35 minutes, or five per cent of total observation time.

Explanation. Thirteen rooms visited; 411 children observed; total time spent in 13 rooms, 31 hours, 55 minutes. In all, 95 minutes were given to free oral expression, which is five per cent of observation time. This practice represents the median for the twelve cities studied.

TABLE VI

CITY	AVERAGE NUMBER OF PUPILS PRESENT	PERCENTAGE OF TIME FOR FREE ORAL EXPRESSION
No. 1	43	.09
2.....	31	.05
3.....	38	.02
4.....	47	.02 $\frac{1}{2}$
5.....	35	.13
6.....	39	.03
7.....	34	.04
8.....	30	.05 $\frac{1}{2}$
9.....	38	.14 $\frac{1}{2}$
10.....	32	.17 $\frac{1}{2}$
11.....	35	.004
12.....	35	.07 $\frac{1}{2}$

grow in language power entirely by listening to the teacher or by set drill exercises. In a few of the places observed, notably in cities No. 5 and No. 10, the children participated actively in a large part of the program. There was no more time set aside for language on the daily schedule in these schools than in the other systems, but there was a marked tendency to encourage the children to discuss what they were doing, to ask questions, to reply freely and fully, and to help make plans for various affairs of school life. Language functioned normally a considerable part of the day and the teachers had many opportunities to help the children to improve.

Is the introduction of a large amount of silent reading going to cut off almost the only opportunity which children have in some schools to be articulate? In cities No. 2, 3, 4, 6, 7, 8, and 11 (see Table VI), first-grade children were scarcely vocal at all except when they read orally. Substitute in these cities certain kinds of silent-reading exercises in place of oral, and the children will become mute indeed during school hours. In such exercises as the following they are not allowed to speak but must perform these futile illogical acts in perfect silence:

- Put the red box on the green mat.
- Go to the girl by the door and touch her dress.
- Get a big block. Take it to the man by the window.
- If you are six years old, clap your hands and make a bow.
- If you have a sister in this school, come to me and shake hands.
- Go to the lady in the back of the room. Tell her how tall you are, and ask her if she lives on First Street.

Silent "stunts" of this type should be used in moderation. If introduced to any extent in a non-English-speaking school population, then the opportunities for purposeful speech should be greatly increased in other ways.

There is another kind of silent reading which not only

serves the particular purposes of building up efficient reading habits, but also provides a most profitable and developing type of oral expression. I refer to carefully supervised silent reading of worth-while material followed by or interspersed with pointed discussion calculated to reveal the depth and extent of meaning obtained. This kind of silent reading provides, far better than did the old-fashioned oral reading, for purposive, thoughtful, and somewhat original expression of ideas. It is one of the best means of furnishing immature children with a common body of interesting subject-matter for conversation.

QUESTIONS

1. If the point of view presented in passages quoted is sound, are the pupils observed in City No. 11 getting any effective training in speech?
2. You may find it interesting to compare the total number of children present in rooms observed in City No. 2 with the number who actually spoke. Also the amount of time any child could have had if each child present had spoken even once. (See Table V.) City No. 2 is cited because it represents median practice.
3. City No. 10 did not have any more time allotted to language on the daily schedule for first grades than City No. 11. In what ways might one account for the great difference in the amount of free oral expression found in the two cities?
4. Are the facts given in this chapter at all representative of any schools which you know? Have you ever actually timed the amount of different types of oral expression in a classroom?

CHAPTER IX

WHAT ARE THE CONTROLLING FACTORS IN WRITTEN EXPRESSION?

IT is a long step from the free, spontaneous speech of childhood to the stage where ideas can be expressed clearly and pleasingly in written form. In racial development the art of writing is relatively modern. There is, therefore, no deep-seated tendency toward it established in the human organism, no instinctive "readiness" which will serve to urge the individual forward as in the case of spoken language. We discussed in Chapter VII the strong, impelling forces in the acquisition of the latter art, forces so urgent, resting upon instincts so strong, that the young quickly acquire remarkable power without the aid of direct and conscious teaching.

The expression "Art is long" truly applies to the mastery of all the skills involved in written language. In most schools, children make some beginning in the first or second grade, and if they go to college, they will still be studying English composition in their second year, making about fourteen years in all. If they complete only the work of the elementary school, they will devote a good deal of time to written English for six or eight years and will, in most cases, graduate with a very imperfect mastery of the art. A comparatively small but a highly important part of this course belongs in the primary years. The way the subject is begun, the habits that are fostered, and the standards that are set up will go far toward determining the success or failure of the later elementary course.

WHAT SHALL BE THE APPROACH TO THIS COMPLEX ART?

We have again the old, insistent question of how to maintain a balance between content and form, purpose and pro-

cess. This question is unusually urgent in the matter of written expression because two new and difficult skills are involved, spelling and handwriting.

There is probably less real and evident need for writing in the daily life of most children than there is for reading and arithmetic. There are fewer situations which in and of themselves move the young to make an effort to write. Almost all children pass through the "scribble" stage, where their crude markings with a pencil may mean anything or nothing, but the scribble is much more likely to be an attempt at a picture than an imitation of writing. Very early, however, bright children, who frequently see their elders writing letters, get the

idea of sending messages to loved ones at a distance and they begin to try to communicate in that way. Many times an observing child who cannot read or write a word will succeed in producing an excellent imitation of a letter, using a scribble not unlike writing, in fairly straight lines, and sometimes even having the broken effect of a succession of words. Such children can usually tell you what they have written. With a happy, care-free gesture, ig-

FIG. 17. SPONTANEOUS ATTEMPT OF A FOUR-YEAR-OLD TO WRITE.

She is trying to express something and in her effort a poem

norance for a brief time rids itself of all the bother of spelling and penmanship and "writes" freely and fluently. (See Figs. 17 and 18.) Other children accept very early the demands of spelling, fall back upon straight-line printing as a medium, and by dint of pursuing their elders to spell words for them produce little letters which function, at least when the recipient is a fond relative. Such a letter printed by a five-year-old is shown in Fig. 19.

Play Writing.

FIG. 18. SPONTANEOUS ATTEMPT OF A FOUR-YEAR-OLD TO WRITE
She calls her effort a letter and succeeds in producing the general appearance
of writing.

This desire to communicate is, of course, the great fundamental one in writing. Ancient man wanted to communicate with his fellows when separated from them by space, and gradually evolved a system of symbols by which, on wood and stone, on skin and papyrus, he could send his message. He wanted also to reach those separated from him by time, and he cut, carved, and drew these symbols on the most permanent material available, recording event

and circumstance which he deemed important. Fancy was sometimes mixed with fact in these ancient records, and thus the creative instinct found expression through graphic art.

We have gone far since primitive times in the *how* of writing, but the *why* remains the same; we desire to communicate, to record, or to create. The average person is moved by the first two needs or desires far oftener than

FIG. 19. LETTER OF A FIVE-YEAR-OLD KINDERGARTEN CHILD
Most of the words spelled by an older person.

by the third. In fact, many well-educated people live to respected old age and never really create anything in the medium of language.

SINCE PURPOSE IS AN ESSENTIAL FACTOR IN WRITTEN EXPRESSION, WHAT OBJECTIVES ARE MOST SIGNIFICANT FOR CHILDREN?

In an effort to get a rough estimate of the most common everyday uses of written language, several large groups of graduate students have been asked to enumerate them according to their own judgment. They were directed to disregard their written work as university students and all special professional work, such as that of teachers, lawyers, and preachers, and to confine themselves to uses for writing which they found in their own personal, social, and business relations. These uses or needs were to be listed as nearly as possible in the order of frequency, putting first those believed to be most frequently recurrent, and last, those which seldom arise. These lists were prepared in class without previous warning. Those participating were given only about ten minutes in which to think, the object being to prevent them from searching their minds for the infrequent and unusual. Almost all of these lists contain the first seven items in the sample given below. Comparatively few of them include the last three items. The order in which these items appear closely approximated in most cases that of the sample. *Letters* and *memoranda* invariably came first, while *copying* and *reproducing*, if mentioned at all, occurred far down in the lists, showing that the writers regarded them as of relatively small importance.

A TYPICAL LIST OF THE COMMON EVERYDAY USES FOR WRITTEN EXPRESSION IN THE LIVES OF NON-PROFESSIONAL ADULTS, ARRANGED IN THE ORDER OF RELATIVE IMPORTANCE AND FREQUENCY OF USE

1. Letters
Including all kinds of social and business correspondence.
2. Memoranda. Lists. Orders.
3. Directions.
4. Business papers, such as:
Bills.
Income-tax returns.
Insurance papers.
Contracts.
5. Club work.
Reports.
Minutes.
Papers.
Speeches.
6. Diaries. Line-a-Day Books.
7. More or less original work.
Verse.
Stories.
Sketches.
8. Copying.
9. Taking dictation { Exclusive of the work of stenographers and copyists.
10. Reproducing stories.

When adults begin to examine closely into the ways in which they ordinarily employ writing, they are usually surprised at the infrequency and meagerness of the output in all directions except that of letter-writing. Educated, non-professional people, of course, vary to a considerable extent in the amount and kind of writing produced, but for most of us *communicating*, in the narrow sense of the term, is the one great demand. Next to this seem to come records of various sorts which the individual desires to make for temporary or more permanent use and satisfaction. It is an interesting

fact that the ordinary citizen seems to have little or no use for the three kinds of exercises which the primary school has demanded more than any others, copying, taking dictation, and reproducing stories.

It is highly probable that in the free life of children outside of school and in a rich varied school life having a social atmosphere and organization, many of these same needs will arise. Youth and inexperience may, however, cause them to assume different comparative values. The fourth item, *business papers*, may drop out altogether; *copying and taking dictation* may rise to greater prominence through genuine need; and more scope may be found for *creative work* in the play life of children than in the prosaic life of the average adult. Considering the dominant interests of the younger children, probably personal communications of all kinds and personal records furnish for them as for their elders the strongest, most genuine, and most frequently recurrent appeal. The important point is that beyond the purely scribble stage there must be some genuine use and purpose for writing if we are to train in any but the most technical features of the art, such as penmanship and spelling.

LETTER-WRITING IS AN EXCELLENT STARTING-POINT

For many years a good deal of attention has been given to the matter of letter-writing in elementary grades. The strength of the appeal to little children, however, has not been so commonly recognized. We have seen how mere babies delight in sending messages in their own penciled scrawl, and it is an easy and natural step for the primary-school child to learn really to write tiny messages. At whatever period writing is begun, whether in advanced first or in second grade, children delight in learning to write surprise notes to take home to father and mother or to tuck into the letter which an older person is sending to a relative or friend.

Such phrases and sentences as, *My love; Lore to mother; Three kisses; Six kisses to daddie; Your little boy; Your little girl; I love you; Come to see us; Come home soon; I am well; I want to see you; I did good work* — written by children and sent or delivered to the appropriate person — constitute a beginning in written expression conceived of as a means of personal communication.

Greetings for various seasons and occasions should play a like part. *Happy Easter; Merry Christmas; A Happy Birthday to —; We missed you, — (supply name of child who has been absent); We are glad to see you back; Welcome to our room* — may be written on paper and delivered, or attached to the bulletin board, or written on the blackboard to greet the eyes of an individual or a group, as suits the case. Children should very early learn to participate in putting needed instructions and injunctions on the blackboard; such as, *Please do not erase; Please save; Please be quiet; Do not forget to clean up; The play will be at ten o'clock; It is time to stop; Look at the clock; Be on time*, etc.

The reality and sense of importance that attaches to work of this kind as compared to the perfunctory exercises so common in primary grades is shown by an incident that happened in a second grade. A meeting of the grade mothers was to be held one afternoon in a second-grade room. The children were learning to write greetings and messages of various kinds to be written on the blackboard and left there for the mothers to read. One little girl said her mother was not very well and might not be able to come to the meeting. She asked to learn how to write, *I hope you will not be sick*. While she was practicing the sentence on paper, her mother unexpectedly entered the room. She finished the paper and, childlike, took it to her mother instead of waiting and carrying out the original plan for the afternoon meeting. Presently she was seen to be weeping bitterly, and it was dis-

covered that her mother had laughingly pointed out a mistake in her work. She had omitted one little word, and her message read, *I hope you will be sick.* The child was deeply distressed when she realized what she had said. Many children have shed tears during the painful process of writing "compositions," but few have done so because stirred by the meaning conveyed.

There are systems of teaching penmanship which forbid or vigorously discourage the use of writing to express real ideas in the beginning stages. Some advocates of these systems claim that writing is being used as a means of expression when young children are drilled to write, *See me; I can see; Men see; See the nut; See the nest*, etc. The difference between such phrases, produced as a penmanship exercise and the genuine message, is obvious to any one, and the clear-sighted sincerity of children makes them especially keen in recognizing the difference. Whether the technical difficulties involved in learning to write make it inadvisable to begin with real ideas is another question which will be discussed in the next chapter.

From the message or note which can be expressed in a single sentence, the complete letter will gradually be developed. The body of the letter may be very brief, but a few of the essential elements of form will now be taught. If, however, we really care about helping children to develop the ability to write an interesting letter, we will be careful not to go too fast in the matter of form and will keep attention strongly centered on meaning and purpose. This can be done only through the frequent writing of real letters to real people. The imaginary letter to an imaginary person is a very poor substitute.

Even in the topsy-turvy world of *Alice in Wonderland* it was considered unreasonable to suppose that a letter would be written to "nobody." In the trial of the Knave of

Hearts, the White Rabbit offers as evidence a mysterious paper which has just been picked up.

"What's in it?" said the Queen.

"I haven't opened it yet," said the White Rabbit, "but it seems to be a letter written by the prisoner to — to somebody."

"It must be that," said the King, "unless it was written to nobody, which isn't usual, you know."

Any one who has ever received spontaneous letters from a child knows that they are very different from the usual textbook model. They are also very much better in all except possibly the formal aspects. The model letter may be useful in fixing certain habits and establishing certain desirable customs, it may serve as a convenient reference when the learner is uncertain as to an approved form, but no one ever learned to write a letter that others would care to read by consulting or imitating models.

I have been collecting children's letters for a long time, and I now have specimens ranging from the tiny sheet, containing only a few words printed in large capitals by a six-year-old, to the well-written and well-expressed friendly letter from a mature twelve-year-old. I have also a few of the kind that are produced by children when some over-anxious and over-ambitious grown-up stands over them and requires that they turn out a perfect product. Such letters are perfect only in the sense that there are no mistakes in spelling, punctuation, and arrangement, and that the writing is as good as the child can produce by the utmost care and perhaps only after making several copies. As *letters*, they are not much better than a blank sheet would have been. They say very little, and that little does not come from the child's heart and mind. When our own little son or daughter, niece or nephew, or child friend writes to us, most of us would prefer to get the true spirit and flavor of the unique individual even though there are some mistakes.

Indeed, it is the naïve thought, original expression, and imperfect form which make children's letters so delightful.

Compare the following letters. The first three were written as a class exercise in a third grade. Thirty-five children were expected to write about the same thing, and the subject was one regarding which they were evidently densely ignorant. Their "letters" were to be addressed to the teacher, who knew all about the subject. Indeed, it was she who had "learned" them about dew.

At School,
October 20, 1915.

Miss C—,

Dew comes from the herd [earth].

Angelo

At School,
October 20, 1915.

Dear Miss C—

The dew is formed from the air. And when the cold air touches the sky. The dew falls and that's what how dew is maked.

from Mary McC—

At School,
October 20, 1915.

My dear Miss C—,

I am very sorry to here that you have learned us about the flowers and the drops of dew is on the warm earth.

From
Helen D.

The children show that they know something about capitalization, punctuation, indentation, the heading, salutation, and closing of a letter, but do they know anything about real letter-writing?

The next letter was written by a boy five and a half years old to a relative with whom he was on terms of intimate comradeship. When together they were real chums. The boy's

mother believed that a child should never be permitted to make the slightest error if it were possible by watchful oversight and correction to prevent it. The result in this case was a message of ten words written with incredible perfection, but not a touch of the real boy is there in it.

Dear D— and
Aunt B— ;
Thank you for
the books. I like
them very much.
Good-by, with love,
F—.

The next was written in school by a second-grade child who really had something of importance to communicate. He was probably responsible to his classmates in the matter of securing the needed help.

Training School
Valdosta, Ga.

Dear Mrs. S—,

The flowers are dying. What can we do for them? We wrote this letter to you for we did not know what to do for them.

John D. B—

The fourth letter is from a little seven-year-old girl written during vacation to her teacher of the year before. It reflects real personality.

F— City, Ind.
July 26, 1919.

Dear Miss C—,

Have you ever thought of your little curly headed girl, since you went away?

I have thought of you lots of times, and wish I could see you. Now I can laugh at you sitting in school studying while I am running around on the farm bare footed and having a good time. July 16, Sister, William and I went to a Sunday School picnic. A thunder cloud came up and we had to come home in the rain, we had lots of fun and lots of good things to eat.

Mamma gave me a white hen and Wednesday she came up with eight little biddies, every one black. Don't you wish they were yours?

With lots of hugs and kisses

From

L—P—S—

The last example is also a home letter preserved for over a quarter of a century by the one to whom it was addressed. This little eight-year-old girl made some mistakes, but she told just the things "Aunt Grace" would have wanted to know and succeeded in conveying the spirit of cordiality which was a strong family characteristic.

November 20, 1898

Dear Aunt Grace,

I hope you are well. We all went to Sunday School and Dorothy went in a kindergarten class. We were all vaccinated last Tuesday in two spots. Anna and Dorothy have a new drass and in the second grade. We are all well and I hope all of your little scollars are well. I hope that you can come down thanksgiving and Christmas both. Anna birthday is next week and I hope you will be down any way. Mama has a mew cape and waist a she has a verry big coldsore on her lip. Dorothy a I have a mew coat. I went down to Grandma's three weeks ago and stayed all might. I an letting my hair grow long.

This is all that I can think of

from Margaret G—

We should try to make children feel that it is possible to have a good time in writing letters, for of course the purely friendly letter is a poor thing unless there is evidence that the writer *did* experience some satisfaction in writing it. To this end a collection of letters freely written by other children will be a great help. A number of these may be read to the class, and they will see that in some the writers were having a good time in writing and that others give evidence of no such attitude. It is easy to obtain original, spontaneous, and lively letters written by children to use as examples. If

untrammeled child correspondents are lacking, one has only to ask one's friends to contribute from letters which they are receiving.

AN IMPORTANT FACTOR IN WRITTEN ENGLISH IS FOUND IN THE CHILD'S OWN LIMITATIONS

It is important that some sort of balance be kept between what pupils wish to do and their ability to accomplish the end. If mastery of the tools is to be acquired through daily use, we must see to it that the undertakings are not too ambitious at first. The one thing that upper-grade teachers beg primary teachers to accomplish is the development of the sentence sense. The lack of this sense is seen often in the high school, where students offer a phrase or a long formless succession of phrases as a sentence. One sometimes meets college students who seem not to know the difference between a complete and an incomplete statement.

The small plans of the younger children calling for brief records and memoranda offer excellent natural occasions for learning to write simple sentences. Only a little needs to be said by the child and he can be taught to say that little completely. The following entries made by a little third-grade girl in the school diary illustrate the point. Each child in the class made a book which they called a diary. In it they recorded the principal things which they did during the period of the day called "free time." At this period they had considerable latitude of choice as to occupations and the record was to show what choices they had made.

On the outside cover of this particular book the child printed — *What I do in free time*. These are a few of the items which she entered between January 5 and May 19, 1922.

Jan. 5. I made my free time diary book.

Jan. 6. I fixed my spelling book. I finished a book.

Jan. 11. I spent all my free time in the library.

Jan. 17. I made a counter for a flag game.

Jan. 19. I started to make a doll for my sister.

Feb. 1. I had to begin my doll over again. My doll was not made correctly.

April 13. I helped to fix Joan's birthday table.

April 20. I made a May basket.

May 18. I wrote a composition about clean cows for our milk movie.

If children keep some sort of a record of daily happenings, a clear concept of the simple sentence can be well established by the end of the third grade by this one means alone. It may be in the form of individual books like the above or individual daily cards may be filed. If the school is so organized that there is a dearth of interesting individual items to be recorded, then a composite class book may be kept in which children will take turns in entering items of interest to all. The group in this case will usually decide what is to be told, and thus they will obtain practice in formulating good statements. The following records are taken from a second-grade "Class Book" of this sort.

Dec. 10. We saw the First Grade play.

Dec. 20. We made chains for the Christmas tree.

Jan. 8. It is snowing hard today.

Feb. 12. We made some pretty Valentines.

Feb. 14. Our Valentine box was full.

March 1. Miss —— gave us a lovely plant. It is a begonia.

March 6. John W. has been sick a long time. He came back to school today.

Matter-of-fact material of this kind offers the least temptation for the imagination to soar and for ideas to run far ahead of the meager ability to express them in written form.

**WRITTEN WORK SHOULD BE SMALL IN AMOUNT AND
VARIED IN CHARACTER**

Children should not be asked to write accounts of everything that they do or see just for the sake of extracting a lesson in composition out of the experience. It has been a common practice to require pupils to write a somewhat extended account of every interesting occurrence, even though no use was to be made of the compositions. Such writing is usually forced and perfunctory, and the way it sometimes strikes fresh young minds is shown in the following incident: A group of third-grade children went with their teacher in the spring to a lovely woodland spot to get acquainted with the wild flowers. The day was beautiful, quantities of flowers in great variety were found, and each child was permitted to gather a handful. A few plants were taken up by the roots for the school wild-flower garden. It was a very happy day for every one. Returning, the teacher walked for some distance behind three little girls who chattered together. Presently one of them remarked to her neighbor, "Don't you dread to-morrow?" "Why?" said the second child. "Because," was the reply, "you know we'll have to write about this." They never knew that the teacher heard the conversation, and they must have had a happy surprise when the week passed and no written work on the subject was called for. The teacher reviewed her practice and realized that written exercises called for in the past had been too extended, too frequent, with little real purpose, and that they had often suffered the disadvantage of an anticlimax.

To obtain the best results, provision must be made for variety in written work. The teacher in the situation just described had fallen into a rut. Everything was grist for the English mill, and she had lost sight of the need of fresh

incentive and sincerity of purpose from the child's stand-point. With a little suggestion this group could have been led to arrange a pretty bunch of their blossoms to put on the desk of Miss ---, a favorite teacher who could not go on the excursion. They would have been glad, too, to write a nice little note to accompany the flowers. Perhaps some of them would have liked to make a brief record and diagram showing just where certain of their wild-flower plants were placed in the garden in order to identify them with greater certainty the next year. They might have liked to arrange a table in the hall for all the school to enjoy, placing on it bowls containing specimens of their wild flowers properly labeled. A committee might have liked to discover and copy some selections of verse about violets, Jack-in-the-pulpit, Bloodroot and Dutchman's-breeches to place beside the appropriate flowers. Some of the children would certainly have done good work in drafting speeches to be given in Assembly or before another grade telling about different parts of the trip. The mild protest of the little girl was probably largely due to her unconscious rebellion against a monotonous and apparently useless task.

PROVISION SHOULD BE MADE FOR CREATIVE WORK

While simple everyday affairs should form the basis for the larger share of the written work during primary years, the creative impulse should not be neglected. The desire to invent stories finds its best outlet at this time in oral narration and dialogue where the more certain control over speech offers less hindrance to the flow of ideas. Only in exceptional situations in our schools should we expect much in the way of original creative work in written form below advanced fourth grade. In a school where most of the pupils are of English-speaking parentage with a good social background, we may look for excellent work of this sort in the

third grade. But wherever it is attempted and with whatever type of children, much encouragement and guidance will be needed by all but the most original and imaginative. The more opportunity the children have had from kindergarten on to make up and tell little stories of their own, the easier it will be for them to take the next step and begin to write out their stories for others to read. In this type of work some children will stall completely, and others will have a wealth of ideas far in excess of their ability to express them.

Many teachers shirk any attempt to include creative work in the primary course in written English because it is so difficult to conduct. Each child is composing individually with a different plot or scheme and with widely different abilities. All will need assistance in spelling and some will appeal for aid in sentence construction. How can help and guidance be given to thirty-five children when their needs are so different? Writing of this sort should rarely be attempted by one group while the teacher is engaged in teaching another class. She should be free to give her undivided attention to those who are writing, and she must know how to create an atmosphere of confidence and anticipation of pleasure in the results. While children are engaged in this sort of writing, some teachers like to sit where individual children can come to them for a brief conference in low tones. Others prefer to move about the room responding to raised hands here and there, writing needed words on pads placed on the desks, asking questions, offering suggestions, and acting as general adviser.

It is worse than useless to attempt to force the more stolid or literal-minded children to produce stories calling for creative imagination. Where the native impulse is lacking, if it cannot be supplied through acquaintance with fine fairy-tales and simple beautiful poetry, and through contagion

from the more gifted children, no amount of insistence will bring a product worthy of the energy expended. With the child as with the literary genius, it is the attitude of play, of delight in invention, which is essential to the creation of original, interesting, and beautiful forms. Let the more matter-of-fact children continue with their tales of pets, toys, and real children, while the more imaginative minds play with plots and scenes laid in fairyland.

Very short stories should be encouraged, or if the tale must run to greater length the writer should be urged and helped to break it up into short chapters or episodes. One little six-and-a-half-year-old boy made up an amusing story about a mouse family. The story grew serially by short sections from day to day, and occasionally he would bring to school a chapter written at home on an old typewriter. Here is a specimen chapter written without assistance:

The Cat and the Rat
by Stewart S.

One day the cat thought he would visit the rats
Mr. rat said "how do you do? I have not seen
you for a long time". Mrs. Rat said "how do you
do." then they sat down to talk. and then mrs. rat
whispered into Mr. rats ear that better watch Mr.
cat who had begun to snee.

Stories which children make up are more original than the modern fanciful tales written by adults for children. The latter are almost invariably a re-combination of familiar features of old well-known fairy-tales or they are confessed or self-evident imitations of such tales. Children, too, weave together incidents and characters from their nursery tales, and they build stories which resemble in some ways those found in their story books, but they achieve many unique and refreshing combinations. In these "made-up" stories there is an excellent opportunity to develop gradually

a consciousness of form or pattern and a sense of what is pleasing and satisfying in plot and incident.

The following story was written in school by a third-grade child. It shows that the little girl had a well-developed sense of organization. In type, it is like the explanatory myth so common in the folklore of all races, which attempts to reveal the why and wherefore of some natural phenomenon. In this respect it is an imitation, but it possesses also distinctly original features, and is a good example of how imagination may be led away from formless wandering into a charming pattern.

Mr. Tee Whiskers and the Fairies.

Mr. Tee Whiskers was eating bread in
the pantry when he heard a noise.

He squealed "that must be Susan with
the trap. I must hurry away. Oh where
shall I go." Oh! I know I shall go to
Fairyland.

"I'll pack my bag
and hurry away
For fear a cat
Will come some day."

He started out and met his friend Mr.
Duck. "How-do-you". Mr. Duck, where are you
bound this fine summer day."

I am bound for Fairyland," quacked Mr.
Duck. Why! are you going to Fairyland
too? That is where I am going.

"If that is so I will take you on my back"
exclaimed Mr Duck

So Mr. Tee Wiskers jumped on his back
and rode down the river.

So when he arrived at Fairyland
he saw the pretty little fairies
dancing among the water lilies
in the moonlight.

"Hello!" cried the fairies to Mr

Duck and Mr Tee Whiskers,
 "have you come to see us?
 Yes! replied the mouse "I have come
 to live with you?
 "All right," answered the Fairies,
 but you might drown."
 "Cant you make me so I can fly
 over the water."
 "Indeed" said the queen of the
 Fairies "I'll change you into a bat.
 "Thank you thank you" laughed
 Mr Mouse. So the fairy queen
 waved her wand and said
 "Be a bat
 My little rat
 and I shall give you a hat.
 So Mr. Tee Whiskers took on his
 wings and flew out into the
 night. This is why we have
 bats flying at night.

It is a good thing occasionally to have the whole class coöperate with the teacher in the construction of a fanciful tale according to some clear-cut plan of organization. The teacher may suggest a good story pattern, children will contribute incidents and appropriate details, and individuals may write certain definite parts of the whole. The following account of how a composite story of this kind was written is taken from *Training School News*, Valdosta, Georgia.¹ Miss Myrla Morris was the teacher in charge:

THE RED CROSS IN TOYLAND

One of our story-books tells us that a fairy with a golden wand comes to the playroom at twilight, setting the toys free to talk and play together as real children do.

The Second Grade has used this idea in making up the following

¹ "The Red Cross in Toyland," *Training School News*, Valdosta, Georgia, December, 1919.

story of how the Red Cross was organized in Toyland. It was modeled after one of their Primer stories of last year and was written for the First Grade to read and dramatize. Each child wrote a part of the story, the best being selected and put together in the complete story.

MYRLA MORRIS

1. Once upon a time there was a little girl. She lived in Toy-land.

One day she said, "I will join the Red Cross. I will nurse the wounded soldiers."

So she walked and walked.

(Dorothy H.)

2. By and by she met a toy dog.

"Good morning," he said. "where are you going today?"

"I am going to join the Red Cross."

"May I go too," asked the Toy Dog.

"What can you do?"

"I can find the wounded soldiers."

"Come along", she said.

(Steve S.)

3. By and by Little Doll met Rocking Horse.

"Good morning, Little Doll", said Rocking Horse.

"Where are you going today?"

"I am going to join the Red Cross," said Little Doll.

"May I go, too?" asked Rocking Horse.

"What can you do?"

"I can bring the soldiers to the hospital."

"Come along," said Little Doll.

(Mary Wyche)

4. So she walked and walked till she came to the tin soldier.

The Tin Soldier said, "where are you going today?"

The Little Doll said, "I am going to join the Red Cross."

"May I go too," asked Tin Soldier.

"What can you do?"

"I can march in the parade."

"Well come along," she said.

(John David)

5. By and by she came to the Toy Drum.
 "Good morning, Little Doll," said the Toy Drum.
 "Where are you going today?"
 "I am going to join the Red Cross," said the Little Doll.
 "May I go too?" said the Drum.
 "What can you do?" asked the Doll.
 "I can beat for the soldiers to march in the parade," said the Drum.
 "Come along," said the Doll.

(Elwyn S.)

6. By and by they met a flag.
 The Flag said, "Good morning, Little Doll." "Where are you going today?"
 "I am going to join the Red Cross."
 "May I go too?" said the flag.
 "What can you do?"
 "I can wave in the parade," said the flag.
 "Come along," said the Doll.

(Ruby Cain)

7. They met the Toy Cat. [A toy bank]
 "Where are you going?"
 "I am going to join the Red Cross."
 "May I go too," asked the Toy Cat.
 "What can you do?"
 "I can save the money," said the cat.
 "Come along."

(Mary Hagan)

8. So they walked and walked till they met all the girl dolls.
 They said, "Where are you going?"
 The Little Doll said, "I am going to join the Red Cross."
 "May I go too?" said all the little girl dolls.
 The little Girl Dolls said, "We can knit and sew."
 "Come along," said Little Doll.

(Johnsie E.)

9. Then she went on until she came to all the Boy Dolls.
 "Good morning, Little Doll, where are you going?"
 "I am going to join the Red Cross."

"Let us go, too," the Boy Dolls asked.

"What can you do?"

"We can work and save."

So she said, "Come along."

(Lloyd J.)

10. Then they all joined the Red Cross and had a parade.
The drum began to beat;
The soldiers began to march;
The flag began to wave;
The dolls began to march.
All the toys in Toyland marched in the parade.

(Sara Jones)

Every year adult writers produce and publish quantities of stories for children patterned after the old accumulative tale, and many of them fall far below this one in interest and charm. Probably the fact that "The Red Cross in Toyland" was written expressly for the first grade and intended for them to read and dramatize, served to stimulate and direct, in a measure, the efforts of the writers. Through such a piece of work there is every opportunity to give excellent training in ordered thinking. The little tale represents a high type of rational, organized thought within the realm of playful fancy.

Another type of original production which many children greatly enjoy is the rhyme or stanza of "po' cy," and almost all can be led to make some attempt at it. It is a common observation that most children pass through a period of play with words when they make up more or less meaningless jingles and appear to get great satisfaction from chanting them. Mere rhyme and measure, and delight in invention seem to form the basis of their pleasure. Many kindergarten and first-grade teachers recognize the value of this tendency and utilize it long before the children are able to write. They are encouraged to make up rhymed couplets,

and to recite them. The best are written down by the teacher with the author's name attached, and sometimes a good little tune is found for them. Often this activity is initiated by seizing upon some very silly, annoying reiteration of a doggerel strain which one child perpetrates and by helping him to improve it so that it possesses some degree of fun or sense. Here are a few rhymes that have been dictated by young children:

Ting-a-ling-a-lee
Won't you come to tea.

The table is set
Now what shall we get?

Come and see my pretty boat.
Come and see how it will float.

See my dolly in her chair.
See her pretty yellow hair.

This is Mary Ellen Cram [a doll]
In her pretty yellow tam.

Occasionally we meet a child who has a real talent for this sort of thing, but most children have only a rudimentary sense which makes them halt and fumble in their inventions. Some definite help from the teacher will in most cases be needed in the beginning, and it is time well spent both from the standpoint of language development and of the delight which most children take in the exercise.

There is little doubt that beyond the couplet, or possibly the quatrain, the necessity to find rhymes becomes a real hindrance to the expression of thought and mood. Many gifted adult poets have broken away from the limitations and strictures which rhyme and exact regularity lay upon them and are expressing themselves through free verse of

different kinds. How much more restricting must the requirements of rhyme be to children possessed of no real talent. Their verses are bound to be commonplace. Yet many children are at times natural poets in thought and feeling. The poems of Hilda Conkling¹ have been a revelation to all who have read them. Only a very few are in rhyme. Cadence, beautiful imagery, the fitting word, and fresh poetic concepts characterize the verse of this remarkable little girl. Such child genius is of course exceedingly rare, but possibly, if we had not hampered children by leading them to think that verse must always be rhyme, we might have opened the door of lovely cadenced expression to some of our pupils. It is worth the effort at least, as is shown by the following selections written by pupils in a public school in New York City.² In order to show the work of younger children we quote here only those written by pupils in the third and fourth grades.

The Bird.

I am a bird.
I fly away and sing.
When I am tired I come home to my nest.
I go to sleep with my head under my
wing.
When I wake, I fly away again and sing:
“Tweet Tweet!”

Anna S., 3A5.

Anemone.

Pretty little anemone
Won’t you come and hide under my
warm fur?
I am pussy willow.
Your dress is thin and you will be cold.

¹ Conkling, Hilda: *Poems by a Little Girl*. F. A. Stokes.

² *A Number of Things*. Written by pupils of P. S. 45, The Bronx, New York City, 1917. Printed and published at the school.

**It would be much better to rest snug and
warm,
Than to freeze in your thin white dress.
Won't you come?**

Louise D'A., 4B3.

The Lilac Bush.

I love the lilacs,
Their leaves are like hearts;
When I go near the lilac bush, they bow
to me.
And I bow to them.

Aida F., 3A.

The Stars.

As I was going to bed,
A little star peeped in,
It shone so bright,
It seemed to say: "good night."

Beckie W., 4B4.

The Bonfire.

Oh! look at the leaves,
They are scarlet, brown, yellow, gold,
blue and red.
Now watch them blaze!
The colored smoke rises like a round
tower,
The fire begins to get lower and lower,
Now there is nothing but ashes.

Paul S., 4B1.

Other verses in this booklet by older children show how, in a city environment, boys and girls, many of them from non-English-speaking homes, find beauty, charm, and sometimes mystery, in commonplace, restricted surroundings. We notice such subjects as *The Street Cleaner, Night, The School Garden, Day Begins, Flying Kites, The Sun-Dial, Sliding Pond*. There are touches of true poetry in almost all

of them produced by cadence, a happy turn or phrase, or a beautiful concept, but in very few of them is rhyme employed to any great extent.

If a song in rhymed verse is to be attempted for some special occasion such as Christmas, May Day, or some one's birthday, it is usually advisable to enlist the pupils in a co-operative effort. The occasion will be discussed, appropriate ideas will be suggested, some one will offer an initial thought, perhaps the teacher will produce a beginning couplet and a clever child may follow with another. Thus, by pooling ideas and skill and by free and friendly criticism, a result may be obtained in which many if not all of the class have had a part. The satisfaction which comes from achievement serves also to stimulate to further effort along the same line.

WRITING SHOULD NEVER BE ASSIGNED SIMPLY TO KEEP CHILDREN BUSY AND QUIET

As soon as handwriting is mastered, there is a temptation in our overcrowded schools to impose written tasks at intervals throughout the day because the work is noiseless and calls for a certain amount of concentration. Copying and the reproduction of familiar stories have been two great stand-bys of busy teachers who are lacking in resource. It is so easy to say, "Open your Readers at page so-and-so and make a neat copy. Be sure to notice all capitals and punctuation marks." A quiet half-hour to teach another class is thus secured, since there is no occasion for even a question from the little copyists. Having children reproduce in writing some familiar story serves almost equally well as a relief from active teaching, though it takes a little longer to launch the exercise. A brief discussion of the story is usually allowed, and some difficult words that are sure to be needed are written on the blackboard before the signal to begin is given. So employed, both of these exercises are practically

worthless. We noticed earlier in this chapter that adults quite commonly omit altogether these two purposes for writing from their lists made up from daily custom and use, or they relegate them to an unimportant place. In school-life, children have more real need for copying, but it is not of the sort described above. In support of such a routine exercise it has been claimed that capitalization, punctuation, indentation, etc., can be taught through copying. There is nothing in the known laws of psychology to support such a view. Children might copy page upon page of print and never have consciousness sufficiently aroused to give a single thought as to why a capital is used here or a period there. One can copy correctly with entire abstraction of mind just as one can "read" a page and not be conscious of a single thought contained thereon. Furthermore, what ground have we to assume that a child will think about why a capital is used any more than he will think about why there are two *t*'s in *little*? In copying, both of these operations are apt to be purely automatic, yet one does not depend on such work to establish the habit of putting two *t*'s in *little*. Where there is such variability as prevails in capitalization and punctuation, there can be no growth in ability to apply the principles involved unless discrimination and judgment are frequently called for.

Some value probably attaches to such operations as copying a favorite song into an individual song book, a good joke into the joke book, transcribing a set of rules elaborated by the class, or the directions for making something. Producing, in duplicate, invitations for some special occasion, or programs for an entertainment, after models have been formulated, constitute purposeful uses for copying. Such work is not so apt to be done in a mechanical way, since there are personal objectives in view which would be partially defeated by thoughtless work, and since in several of the instances mentioned the pupils have themselves evolved the original copy.

Reproducing a story in written form is not such a mechanical operation as copying, but, compared with the training which comes in the process of preparing and giving a good oral reproduction, it ranks very low in educative value. If the story is a fine one, it will be mangled and utterly spoiled in the inefficient hands of primary children, and if it is cheap and commonplace to start with, why spend time and energy in an attempt to reproduce it? The most valid reason for written reproduction is the preservation of some very short delightful story or anecdote not found in their own books.

Recasting local legends, bits of history, or fragments of myth comes under a different category, and is not open to the same objections as the crude rewriting of a choice piece of literature. Such material will bear rougher handling because it has never taken on a finished art form. Literature has in the past been made to carry far too much of the load represented by necessary practice and drill in written composition, and many textbooks are modeled in a fashion which encourages this tendency.

WHAT PLACE SHOULD TEXTBOOKS HAVE IN THE TEACHING OF WRITTEN ENGLISH IN PRIMARY GRADES?

There are comparatively few texts in English Composition intended to be placed in the hands of second-grade children. In the great majority of cases the first book, of a series or the first part of Book I is intended for use in the fourth grade. This indicates either tacit assent to the position that the textbook has little place in early primary grades or that the experts so far have seldom had the courage to attempt to meet the need. With a few exceptions the textbooks which seem to embody the soundest pedagogical principles in other respects are designed to be used by children at about the fourth grade. This would seem to indicate that the most competent specialists believe that such texts are not very

serviceable with less mature pupils. Handling and interpreting a text adds one more element to an activity that is already complex and has a tendency to check still further the spontaneous expression of beginners. It is exceedingly difficult to follow a textbook closely and still make use of all the small personal and immediate occasions for written expression. As a result, textbook topics and methods if used too early tend to establish a stiff, self-conscious, and formal attitude toward writing.

There are situations, however, when the best of the modern books might be of real service as low as the third grade, particularly if kept in subordination to the more vital interests of the group. In rural schools where the teacher has an unusually large number of classes or in city schools where the classes are very large, an attractive book with pleasing pictures, interesting subject-matter, and suggestions suited to childish tastes and aptitudes might be a real asset at this stage.

Where such textbooks are not used by the pupils, teachers should have in their possession several of the best, for they furnish excellent suggestion and guidance. The less competent and original teachers need such help to supplement their own ideas and methods and the more resourceful should be partially guided by good texts in order to insure that the formal phases of English are adequately covered at certain stages.

As suggested above, one great weakness of many beginning textbooks in English is their extensive reliance upon literature as subject-matter for both oral and written composition. Judging by their content one might suppose that almost the sole interest of children was in stories and poems. A close examination of several popular textbooks shows as high as eighty per cent of all exercises based upon literature with very little use of children's active daily life and practi-

cal affairs as subject-matter. This must be due to the ease with which literature can be handled in a book and not to any well-founded estimate of its relative importance in the verbal expression of either adults or children.

This overemphasis is partly responsible for another defect, the scant attention paid to the genuine application of what is taught. Comparatively few books make any attempt to point out to pupils interesting ways in which they may make use of the points presented. Ground has been broken in this direction, however, and a few of the newer textbooks offer hints and suggestions showing how some of the exercises may be adapted, imitated, or directly applied to some situation of real importance to a particular group. Teachers and children are made to feel that the main purpose of the textbook is to point out interesting things to be done, to show some good ways of doing these things, and to stir the class to discover or create other situations more appealing to them. The dramatized story, assembly program, model letters, descriptions of pictures, games, and other experiences are presented as a direct challenge to pupils to produce something similar but of more immediate significance and use to them.

QUESTIONS

1. What should be the guiding principle in teaching letter-writing? Apply this principle to the letters your pupils have been writing in school.
2. What criteria should determine selection of subjects or material for written language?
3. What ways for developing the "sentence sense" are presented in this chapter?
4. Why did the children not wish to write about the wild-flower excursion? Are the author's suggestions for written work in that connection better from the standpoint of child psychology? Why?
5. What types of creative work are mentioned in this chapter? Which of these would you care to try with your pupils? Which do you consider least practicable and why?

CHAPTER X

THE INFORMAL APPROACH TO WRITING

EAXTING and minutely detailed systems of teaching penmanship constitute a pernicious interference with the natural development of self-expression through writing and with the normal development of handwriting itself. In schools making any claim to a recognition of modern psychology there is not another skill or subject that is permitted to take such an isolated and domineering course as is penmanship. In many places months and even years must be spent in acquiring a certain degree of mastery over the technique of movement before teachers dare permit or encourage their pupils to use writing as a genuine means of expression. It is quite common to spend nearly all the time that can be devoted to writing for the first two years in muscular movement exercises and other related features of technique. It is further urged that for another year or two such exercises should predominate over any freer, more purposeful use of handwriting. In a great many of our schools children six years of age and even younger are being subjected daily to wearisome, meaningless drill in a technique requiring very fine coördinations and a high degree of concentration for which they are in no way equipped.

What are the arguments used in support of such procedure? They are the stock arguments that have been used at one time or another in defense of an over-systematized and logical approach to almost every subject in the curriculum. It is said that in a manual art such as writing, the establishment of right muscular habits is of paramount importance; that these habits form a hierarchy or a coördinated system in which certain basic ones must be established first,

followed by others until all are integrated into a unitary habit; that the attempt to use the skill in a rudimentary state interferes with the system; and that getting mastery of the instrument as a mechanism during the early years when there is not much use for it is a measure of economy. Furthermore, it is claimed that, because handwriting is such a very complex skill made up of many small habits, it is particularly disastrous to deviate from the logical order of some elaborated scheme. This same theory held for many years in the matter of teaching children to play on the piano, but it was discarded in that field long ago. Yet the art of piano-playing is certainly more complex than handwriting. The unitary skill is composed of a much larger number of minor habits which must be bound together with certainty and precision. But there is not a teacher of the piano to-day with any professional standing who would start young children with scales and finger exercises and keep them on these for a year or two before allowing them to play little tunes. Successful modern piano teachers do not attempt to build up a fine technique and thus introduce the execution of melodies. They start at once with very simple melodies and harmonies and develop technique gradually in and through the process of "playing the piano."

In the teaching of handwriting we have something to learn from the successful teachers of instrumental music. We have been too easily impressed and dominated by penmanship experts who do not know very much about child psychology. There is no evidence of weight to support the theory that a particular sort of "muscular movement" is basic and essential in the early stages of writing. On the contrary, there is much reason to believe that such drill forms a poor approach to the art. There are scientific studies and experiments which indicate rather clearly the wisdom of deferring and subordinating such exercises.

Professor Frank N. Freeman¹ has reviewed very thoroughly all the leading "statistical, historical, and observational evidence" regarding the efficiency of different methods of teaching handwriting and he has arrived at certain conclusions based on this evidence. The following passages give a partial summary of these views as they bear upon the question under discussion:

Exacting formal drill should not be given before about Grade IV. The greater part of the practice throughout the grades should be given to actual writing of words. Insistence upon position or type of movement should first become strict about Grade IV. During the primary grades only the gross faults should be corrected. . . . Growth in skill of movement is marked at about the ninth year. Few pupils who are given arm-movement drill can use the arm movement before the fourth grade.

The speed of writing should be low at the beginning and should gradually increase from about 30 letters per minute at the end of Grade II to about 73 letters per minute at the end of Grade VIII. . . . Young children are incapable of making new coördinate movements rapidly.

The standard of accuracy should be low at the beginning and should gradually increase as the child gains in maturity and practice. Letters should be large at the beginning because large letters do not need to be so accurate as small letters. . . . The steadiness and accuracy of movement increases greatly with maturity.

The bibliography which accompanies Dr. Freeman's article contains the titles of numerous published reports of experiments and investigations which have furnished ample data for the deduction of the principles just quoted.

Two facts which seem to offer the best guidance to a policy in primary work may be stated as follows:

First, young children are distinctly lacking in motor

¹ Freeman, Frank N.: "Principles of Method in Teaching Writing as Derived from Scientific Investigations," chap. 1, *Eighteenth Yearbook, N.S.S.E.* Public School Publishing Company, Bloomington, Illinois, 1919.

ability, but this ability increases rapidly between the ages of seven and ten years.

Second, modern psychology indicates that it is desirable to keep any developing skill closely connected with its use or application, especially when the learner is immature.

In picking out "muscular movement" and a highly organized technique for early and insistent emphasis, specialists have selected the element in writing which more than any other calls for a high degree of motor ability. It is also the element which has least meaning and significance to beginners, and which, if stressed, causes the long postponement of any real application of the art of writing to childish affairs.

If Dr. Freeman is right in his conclusion that a speed of thirty letters per minute is satisfactory for second-grade pupils at the end of the year, then there is no need for anxious pressure in the matter of muscular movement. If the reader will select a sentence or phrase containing thirty letters and then, with watch before him, will try to write it slowly enough to occupy one minute in the operation, he will realize how moderate the rate is. This rate gives the child plenty of time to form his letters nicely, to make connections carefully, to space properly, and to get a good alignment. All of these elements are probably of greater importance in the early stages than is either greater speed or a particular type of muscular movement.

In acquiring a skill so complex as writing, it is of course impossible to attain mastery over all of the various elements at once. Learning how to form the script letters well and how to connect them properly as they occur in words is perhaps the most fundamental element and the one through which an immediate appeal can best be made to children. The whole word is the smallest unit of thought, and some significant word should be the starting-point for teaching children to write. The child's name may be the first word

taught provided it runs more toward the dimensions of *Tom* or *Anne* than of *Christopher* or *Gwendolyn*. If the whole name is much too difficult, begin with the initials. There is an advantage, of course, in beginning with some word or words which may interest a larger group. Something even easier than the phrases suggested on page 157 may be used at first. Single words to be put on a big chart in connection with a health campaign, for example, may be practiced on the blackboard. If the value of milk is under consideration, such words as *cow*, *milk*, *milkman*, *milk-train*, *butter*, may be taught and afterwards written by individual children on big sheets of paper with suitable illustrations cut from magazines and papers. A large scrapbook may serve to encourage practice in writing. Cut-out pictures may be grouped so that similar objects are on a given page. The children may then practice on the blackboard until they learn how to write such titles as *cats*, *kittens*, *big dogs*, *little dogs*, *trees*, *trains*, *dolls*, *toys*, *little boys at play*, *little girls at play*, *little boys at work*, *little girls at work*, etc., after which the appropriate word or phrase may be written on large sheets facing the pictures.

Another line of thought which calls for very simple, easy expression is found in making a list for blackboard or chart under the heading "What children do to make them grow." The heading is written or printed by the teacher, and the pupils learn to write such words as *run*, *play*, *work*, *rest*, *eat*, *sleep*, etc. A fuller content bearing on the importance of fresh air, the right sort of food, and good physical habits should, of course, be developed through conversation and pictures; and the latter should be mounted on the chart to make more complete the meaning of single words written by the children.

An attempt will be made to describe the steps in a flexible method of teaching beginners to write which has been employed successfully by many primary teachers where an

exacting formal system is not imposed. Take, for example, the making of such a chart as the one last mentioned. We will assume that all the preliminary steps have been taken leading to the execution of the plan and that the children are ready to learn how to write a few words partially expressive of a definite idea. A group is before the blackboard, and the teacher writes rather slowly and carefully the word *run*. "Would some one like to try?" A volunteer is chosen. "Look at the word. I am going to erase it and write it again before you try." The teacher erases the word and writes it again. Again she erases, and the child chosen comes to the board and attempts to do just what the teacher did. If this is begun in advanced first or second grade, the majority of children in an average class will be able to imitate very soon both in form and movement easy words which they see the teacher write. And notice that this is done without a copy before them. Much greater freedom and fluency are obtained where children learn to write from the visual image of both form and movement which they carry in mind and execute as a unit. The kinesthetic image of the complete movement required to write a word is much more quickly and surely imprinted by this process than by the disjointed, fragmentary copying of a word letter by letter or stroke by stroke with the model before the eyes.

Stop practice on a word before the children are weary, and if necessary come back to it again. At this early stage, allow only the most skillful pupils to attempt the final copy on a big sheet of paper for the chart, because change to paper and pencil tends to stiffen the whole process.

Large blackboard space which one is not afraid to use is requisite in this method. The fetish which demands a beautiful, clean, decorated blackboard, with nothing appearing on it except the teacher's very best script, print, or drawing, must be given up.

It is necessary in the beginning to break up longer and more difficult words into syllables, as children cannot be expected to get the complete image of form and movement; but the whole word, as, *butter*, should be presented, and then the syllables *but* and *ter* should be practiced separately and united again as soon as possible. Often it is necessary to practice making single letters or certain letters in conjunction where the connection is peculiar, but these smaller units are taught in the same way. They are singled out because they offer special difficulty, are written by the teacher, erased, and imitated by the children without a copy. From the beginning the teacher helps to analyze the movement while preserving its integrity. She may say, "See how my chalk goes around and then back, to make this *a*." "See how I dip down a little from my *b* before I try to make the *u*." "Watch how I join this *o* to the *d*." She does not hesitate to name the letters when occasion demands or to have the pupils name them, and this kind of writing is an excellent beginning of conscious spelling. A well-coördinated movement in writing cannot be developed faster than the ability to spell, for the moment one hesitates about the spelling of a word rhythmic movement of course falters and stops. In the early stages this control is specific and is secured only through increasing fluency in writing known words.

There is nothing original in this method so far as the present writer is concerned. In all essential features it was in use in the old Cook County Normal School during the régime of Colonel Francis Parker and has been widely used wherever that influence spread.

Supplementary exercises, such as those suggested by Gesell,¹ are probably of assistance to children whose co-ordinations are especially weak, and may be of some value to all beginners. The tendency to use small, cramped writing

¹ Gesell, A. L. and B. C.: *The Normal Child and Primary Education*.

is very rarely manifested in blackboard work introduced according to the plan indicated above. When paper and pencil are adopted later, pupils would not be expected to use the muscular or arm movement to any great extent until about fourth grade at which time intensive training in short periods would be begun. In the mean time finger movement will be permitted for two reasons — first, because it is a legitimate element in any perfected mode of writing, and, second, because we could not prevent it if we would. The only way that finger movement could be eliminated in childhood would be to confiscate all pencils in the world outside of school or put the family and the public on oath not to let a child touch one. How can any one suppose that practice of fifteen or twenty minutes a day in school will counteract all the hours which most children spend in spontaneous unsupervised use of pencil and crayon? If a very moderate amount of writing is called for in primary grades, and if careful supervision is given to what is done, habits involving incorrect position and muscular tension need not become fixed.

MANUSCRIPT WRITING

A form of handwriting called "manuscript writing" has recently been introduced into this country from England where it has been very widely adopted. The method is too new and the data obtainable are insufficient as yet to form a basis for reliable judgments regarding such features as speed, rhythmic movement, and fatigue. Close observers are much impressed, however, with the legibility and beauty of this writing and the ease with which it is acquired.

It is not our intention to discuss here either the history or the specific character of this kind of writing. It is being introduced experimentally into a number of schools and before long reliable data will be available. The method has

been regularly taught for several years in the Brearley School, New York. In 1922 Miss Marjorie Wise came to Teachers

College from England where she had taught this handwriting for a number of years. She was invited to make some experiments in the Lincoln School and later in the Horace Mann School. In the latter school at present this method is being used in all the first and second grades and in one third grade.

back
summer
again
fly
swallow
over
done
away
bringing

Courtesy of Miss Alice M. Stone

FIG. 20. THE BEGINNING OF MANUSCRIPT WRITING, BY A SEVEN-YEAR-OLD CHILD, BREARLEY SCHOOL, NEW YORK

The fundamental forms of "manuscript writing" are somewhat like the type called a "library hand." As its originators were much interested in the aesthetic side, the forms are characterized by simplicity and beauty. In the beginning there is no attempt to connect the letters, but, as greater maturity is reached and as individuality asserts itself, there is a natural tendency toward a cursive style. This gradual development from a type that is really hand-letter-

ing to a more rhythmic and cursive writing may be seen in the sample shown (Fig. 21).

There are several different models or styles of letters in use. An exercise book showing one style was prepared by

On the edge of evening, when the
last of the light was gathered in
the pale-green upper sky, and all
the world of the quiet backwood
clearings was sunken in a soft
violet dusk, a leisurely and self-
possessed little animal came strok-
ling among the ancient stumps and
mossy hillocks of the open uplands,
sheep pasture.

B. Whitelaw. Age 9½

Courtesy of Miss Wise

FIG. 21. EXERCISE IN MANUSCRIPT WRITING FROM AN ENGLISH SCHOOL

two teachers in the Brearley School.¹ An excellent manual is now available. It was prepared by Miss Wise² and is intended as a guide for teachers. She is also the author of a helpful article on the subject published in the *Teachers College Record*.³

One noticeable advantage of this approach to writing is that children can really use it very early in connection with affairs that are important to them and they can readily secure very good effects. Another point in its favor is that, even though another form of writing should be deemed better for general use later, there will always be a place for this kind in connection with the preparation of labels, captions, programs, posters, etc., where ordinary script is unsuitable, inartistic, and often not very legible.

QUESTIONS

1. Are there valid grounds for accepting a strictly logical order in teaching handwriting when such approach has been rejected in other subjects?
2. Try the following experiment with a child of about six years who has not been taught to write. Write an easy word on the blackboard and direct him to copy it in a space below your model. Using another easy word follow the method described in this chapter in which the copy is erased. In the latter case be sure to write rather slowly and let the child see every stroke you make. Notice especially the differences in movement employed by the child in the two methods.
3. From infancy there are many things which seem to stimulate children to print. Might it be a good thing to encourage this strong impulse toward printing instead of insisting on the more difficult cursive writing? What arguments against this practice are certain to be raised?

¹ Stone, Ala M., and Smalley, E. I.: *Manuscript: A Handwriting Based on Early Models*, A. G. Seiler, New York.

² Wise, Marjorie: *On the Technique of Manuscript Writing*. Chas. Scribner's Sons.

³ Wise, Marjorie: "Manuscript Writing"; in *Teachers College Record*. January, 1924.

CHAPTER XI

HOW TO JUDGE OF MATERIALS AND METHODS PROPOSED FOR TEACHING BEGINNING READING

THE question to be discussed couples together the reading matter intended for beginners and methods to be employed because the two are in practice inseparable and mutually restrictive. Too often a method of teaching reading is evolved, textbooks are written which are calculated to carry out the method, the method is elaborated and explained in a manual, and teachers are solemnly warned of the sad consequences of departing from the course therein prescribed.

Even when authors are not so insistent regarding the dangers of using their books in any but the orthodox fashion, a glance at the first books in a series will often reveal the fact that everything is subordinated to a particular teaching method. Primer, first reader, and sometimes the second reader in the more mechanical systems, show that they are mere cogs in a big machine. One can readily see that they are designed to present a mass of printed matter for a special kind of practice. It is inane, disjointed, uninteresting, and often not very intelligible. A normal four-year-old in a family of fair education is intellectually far beyond the content of such books.

Should reading matter for beginners be thus entirely subordinated to some mechanical system or should it be judged and selected in somewhat the same manner as any real child's book — on its own merits from the standpoint of the taste of the owner? Not many years ago this would have been an impossible standard, for the reason that no textbook could have been found which would measure up to the requirement. But it is not too high a standard to-day even

for the primer. There are a number of primers and first readers which, considering the price, will bear comparison with choice gift-books. Several of these newer textbooks, viewed simply from the pleasure-giving side, are far superior to the cheaper picture-story-books which flood the shops at Christmas. Can any procedure be considered good which deliberately limits children and teachers to poor, silly, badly organized material for school purposes and precludes the use of the sort of books to which children eagerly respond? Surely that procedure is best which not only utilizes but *requires*, for successful operation, a superior type of reading matter — superior from the standpoint of the literary, informational, and aesthetic values which appeal to childish taste and interests.

Not only does a rigid and narrow system of teaching reading employ thin, disjointed material in the beginning; it also stands for a negation of most of the spontaneous and independent effort of young pupils and of all individual variation in procedure. With perfection of detail and self-assurance which leave little for the individual teacher or child to contribute, this wordy, attenuated material is dealt out in portions measured by days, and through much drill of one kind or another, determined by the nature of the method, little pupils are carried along a straight and narrow path.

It has been remarked often that children who learn to read at home, as the result of their own desire, do so largely through spontaneous effort and *by the use of a variety of means*. Very often they begin with the alphabet. The letter-forms in picture-alphabet books, on blocks, and wooden cut-outs interest them, and they take the step that comes first in every new experience — ask the name of the novel object. They spell out words in newspapers, on magazine covers, in signs, labels, and story books, and ask some one to pronounce them. Frequently they follow with

their eyes the printed page as favorite stories and poems are read aloud to them, noting where certain prominent and oft-repeated words occur. They notice, also, what is printed under pictures, and where the page is turned. Gradually these selections are unconsciously memorized, and certain words are singled out so often that at last they come to be recognized wherever seen. Many children are keen enough to pierce through the vagaries of the English language with only slight assistance. They evidently build up for themselves a working basis of phonetics by making numerous associations between words that look alike and sound alike. To be sure, this type of learning is exceptional, but we should remember also that the learner has been given exceptional opportunities. We have no means of knowing how many other children might pass, almost unconsciously, into the art of reading, if they were surrounded by the right stimuli and freed from subjection to rigidly prescribed and rigidly applied methods, which leave no place or scope for their own native out-reachings and responses.

So widespread is the idea that there must be some *one* way better than any other for introducing children to the technique of reading that many parents are afraid to respond to children's inquiries along this line, before they start to school or after, for fear of confusing them. Names of the letters of the alphabet are taboo, for they have been told that to learn the letter name will interfere with learning the sound for which the letter stands. Children must never be allowed to print, especially in capitals, for this causes an undue analysis of the word into letters. Calling the letters in a word (or spelling) and asking what the word is, likewise endangers sound foundational work according to certain authorities. And according to those who ardently espouse the whole-thought or sentence method the tendency of children to pick out single words should be discouraged. The advocates of a

system predominantly phonetic feel that any effort of the child directed along other lines in the early stages is wasteful if not positively harmful, and therefore carefully to be guarded against.

Thus, one avenue after another which children have found useful in teaching themselves to read is blocked successfully in school, supposedly in the interests of economy; for, of course, if parents have been warned regarding the danger of such irregularities, the school will not offend by permitting them. Teachers in different places or under different régimes are told that they must print or must *not* print on the board; that they must write or must *not* write; that they must or must *not* both write and print at a certain stage. They are warned never to allow a child to encounter a word in reading which has not been previously taught, never to teach a new word by sight if it is capable of phonetic analysis or synthesis, never to permit a child to determine a word by spelling it, *never* to tell him a word or *always* to tell him a word which he does not know when reading aloud — and so on, with a score of other restrictions and prescriptions. Recently, a supervisor, visiting the room of a newly appointed first-grade teacher, glanced about and then inquired sternly, "Who gave you permission to *write* on the blackboard?" The teacher had been a proved success elsewhere, but she was either unfamiliar with a few of the details of the particular scheme of beginning reading required in this school system, or she dared to think them unimportant.

It is evident that such conflicting ideas regarding teaching beginners to read cannot all be equally sound and good.

CAN RELATIVE MERITS OF METHODS BE JUDGED AT PRESENT BY RESULTS OBTAINED?

Testimony is not lacking as to the superior results obtained in cities A, B, or C by methods X, Y, or Z, and pro-

fessional demonstrators are ready to show how much may be taught a group of children in twenty minutes by one system or another. But these are only individual and often biased opinions. The fact is that data so far secured by the use of standardized tests and scales offer very small basis for such judgments. Surveys tell us how much higher on a certain reading scale the attainments of school D rank than those of school E, also by what fraction of a degree city system A is inferior to system B, but as yet the specific factors which have produced these measurable results have been only vaguely discriminated. Very valuable evidence on this question might be obtained through the use of available objective standards if they could be extensively applied in schools or systems of schools which have followed consistently for several years radically different procedures in teaching reading, and if at the same time all other factors were fully known, but such studies have not been made.

One must also ask, "What is meant by *results*?" For those who claim certain superior products of a given method do not as a rule have in mind the definite though limited values which can be measured in first- and second-grade standardized scales.

Still less frequently have the various claimants any real proof that their pupils exhibit greater advancement than others in abilities and attitudes for which we have no objective measures, such as love of reading, making good choices in reading, knowing how to study reading, intelligent use of books, wider range and deeper appreciation of what is read. On the other hand, if measurement of these less tangible but highly important values were possible, might it not be shown that many children have been rendered indifferent to reading or made to hate it, through the protracted use of clumsy, unpsychological methods reputed to be highly successful?

Speaking of the results of his own searching investigation of fundamental reading habits, Buswell says:¹

While it is evident, from the flexible adjustments which pupils are able to make, that more than one method of teaching reading may succeed equally well in developing mature reading habits, one would not expect to find a large number of equally good methods. Certainly there can be no doubt that some methods are inferior and uneconomical. In the light of present school experience no one would attempt to justify the practice of using the alphabetic method of teaching reading, although pupils trained in this manner will eventually learn to read. As has been stated, the present investigation does not yield the type of data necessary for a judgment of methods, and consequently no attempt has been made to evaluate them. It should not be inferred from this that the psychologist is not interested in methods. The problem of determining which methods are superior and which are inferior is large and significant. It cannot be solved except by following particular groups of pupils through the different stages of growth toward maturity. Its solution will require the combined efforts of the teacher and the psychologist, the teacher trying out the various combinations of methods in the classroom under carefully controlled conditions, while the psychologist furnishes the scientific analysis of results which will show the degree of progress which has been made in each of the fundamental elements of reading.

At the present stage the claim of demonstrated results is not sufficient justification for a given teaching process in beginning reading, because —

- (1) Claimants usually speak without reference to definite standards, and different people seldom mean just the same thing by the term "results."
- (2) Many important products of training in reading cannot be measured by scales now available. It is particularly difficult to measure the quality of first-grade reading.

¹ Buswell, Guy T.: *Fundamental Reading Habits: A Study of Their Development*. Supplementary Educational Monographs, *The School Review and the Elementary School Journal*, no. 21 (June, 1922).

(3) Measurement of more advanced reading has revealed so far nothing more than a suggestion regarding the probable factors influencing the development of certain qualities.

Have we, then, no secure or reliable basis for judgment? Is the sea still quite uncharted after all these years of effort to find rational guidance? The case is by no means so hopeless since psychologists have analyzed the learning process and defined the laws of learning, and since numerous carefully conducted experiments have established certain important facts in the psycho-physical process of reading.

Thorndike¹ points out that, in acquiring or improving any complex mental function, there are an enormous number of bonds or neurone connections to establish or strengthen. He says: "Learning is connecting; and teaching is the arrangement of situations which will lead to desirable bonds and make them satisfying." Further discussion shows that learning would be immeasurably facilitated if we could know exactly the best *order* for the exercise of particular bonds, but that in no single skill, such as piano-playing, typewriting, or reading, has the best order been determined with certainty. In the last-named skill, however, certain factors are recognized as very influential.

IMPORTANCE OF INTEREST AND ZEAL ON THE PART OF THE LEARNER

Interest and zeal on the part of the learner and a feeling of satisfaction in the process and in the accomplishment of results are of such high importance that it is safe to assume that an order of procedure which greatly lessens, destroys, or postpones these attitudes cannot be the best order. For example, in teaching children piano-playing it has been found that much better success is obtained by starting them

¹ E. L. Thorndike: *Educational Psychology*, vol. II, chap. v.

almost immediately with little melodies, instead of requiring them to spend weeks and months as formerly on dull scales and exercises. Many teachers have their pupils very early compose bits of melody themselves expressive of some idea or feeling. These changes have been made in recognition of the principle that straight attack on skill elements meaningless to the child leaves out of account the very influential and beneficial factors, zeal in effort and keen satisfaction in the results. This satisfaction lies at the bottom of what Thorndike calls the *law of effect* in the learning process. Operating negatively, this law causes whatever brings dissatisfaction, annoyance, discomfort, or disappointment to the learner, to be avoided by him so far as possible, or, under necessity, to be endured or half-heartedly undertaken.

It seems clear that in teaching reading we should not begin with elements corresponding to scales and finger exercises in piano-playing. Drill in phonic elements, exercises in analysis and synthesis of "families" of unrelated words, the use of charts and primers which entirely ignore higher thought processes all go counter to the principle just presented. The old error of thinking that the logical order in imparting knowledge or developing skill must be the best order still persists. It is argued that reading, being an exceedingly complex process, the numerous habits involved cannot be acquired simultaneously or with equal perfection at any given time; therefore mastery of foundational mechanics should be kept well ahead of all other features. It is true that the many subsidiary habits which compose the total unitary habit of the practiced reader cannot proceed at equal pace, but they can be made to facilitate each other rather than interfere. At different stages one or another of the component habits, such as mastery of word-forms, response to phonic elements, quick reading of phrases, and thinking of meanings, may need to be especially emphasized, but it is

certainly a mistake in any exercise called reading to ignore meanings. Yet many methods in vogue to-day do ignore, or greatly neglect for weeks and months, the one element without which there can be no real reading and without which zeal and satisfaction rest upon a very weak and temporary basis. It is true that the mere process of gaining mastery, the increasing evidence from day to day which the learner has that he can perform the task in hand and the praise which is elicited by his performance, give sufficient satisfaction to many children in the very beginning. But others respond only faintly to such stimuli, and all intelligent children soon grow indifferent if the more fundamental and permanent appeal of intrinsic interest is greatly minimized or postponed.

WELL-ORGANIZED CONTENT IS ESSENTIAL TO RIGHT READING HABITS

There is much evidence that the elementary habits involved in the total reading process, such as word-recognition, phrasing, and regular eye-movements, do not operate as readily and surely in the absence of well-organized and familiar content. Huey¹ describes experiments made with adults which prove conclusively that a group of unrelated letters cannot be read as quickly as a series of nonsense syllables made up of an equal number of letters, and that a series of nonsense syllables requires more time than a well-constructed sentence of the same length. This is because the reader must actually look at every nonsense letter or nonsense word, whereas, in reading matter which has meaning, the eye is fixed for a fraction of a second each at only a few points in a line. As is quite generally known now, the practiced reader does not really see every word in reading a page of sensible matter. The eye moves more or less regu-

¹ Huey, E. B.: *The Psychology and Pedagogy of Reading*. Macmillan, 1908.

larly from point to point along a line and sees clearly only a short distance from each fixation point. The mind holds in consciousness what has just been read, seizes upon what is seen in a fixation pause, gets a hint here, a clue there, and instantly fills out and integrates the meaning from all of these elements. In fluent oral reading, the eye is always well ahead of the voice. Attention and thought pull the eye along, so to speak, in its physical work. It is clear, then, that interesting ideas, continuity, familiarity, and common, idiomatic English construction, all tend to facilitate the process. These elements have the effect of reducing the number of eye-pauses per line and shortening their duration.

Among the clues which catch the eye and attention and aid in the total reading process, Huey mentions the perception of characteristic word-forms, dominant letters in a word, simple phonetic elements, accustomed grammatical structure, and expectedness of ideas and events presented. No matter how easy a page of printed matter may seem, it is difficult to read if it is weak in ideas, if thought is confused, if the usage is unlike ordinary English, and if the words employed all look a good deal alike — if, in other words, they lack dominant characteristic form.

Almost all of the older primers and first readers were marked by several or all of these defects. A generation or more ago beginners encountered lessons like the following:

Do we go up?
We do go up.
So we do.
Do as we do.
So up we go.

The idea was to make the first lessons easy by employing only two-letter words, since the children were obliged to learn to spell every word in a reading lesson. The spelling • may have been easy, but the reading was hard.

The following is a primer lesson in which phonics is the main idea. Even an experienced adult reader is likely to hesitate and stumble more or less over matter of this sort and to read word by word rather than in larger units. Many of the words look so much alike that it is easy to confuse them, and there is no welding together of words into large thought wholes. There is so little relatedness between the sentences that one does not in any way suggest the next. It is impossible, therefore, to anticipate anything that is coming, and both eye and thought tend to move at a plodding rate.

May is on the cot.
It is a hot day.
It is too hot to play.
May is in a cool spot.
Dot is with May.
Dot is May's cat.
May's cat is fat.
See Dot play with May's hat!

With material in which ideas have been so completely subordinated to a reading technique, it is impossible really to think. The more one tries to think, the more confused one is likely to become even in the mechanical reactions. Merely call off the words in the following selection from the *Ward Primer*¹ and all goes fairly smoothly. Try to think about it and a practiced reader will often hesitate and blunder:

The girl is not
like the dog. She
is like me. She looks
like me.
Well, I like the
girl.
Are the boy and
the girl well?

¹ Ward, E. G.: *The Rational Method in Reading. Primer.* 1907 edition. Silver, Burdett & Co.

He is well; she
is not.

She looks well;
he does not.

Look at me, girl;
Are you well?

I am well, boy.
Do I not look well?
You do look well.

It is impossible to get any clear idea regarding the girl's health and it seems to be best not to think about it. Children attempting to read such material are practically forced to mere word-calling. The Ward readers were in their day a very successful series, but they were published when less emphasis was placed upon content than at present.

The next example is not from some antiquated book, but is a more than fair imitation of a type found in primers of to-day which are widely used and warmly defended. The subject is more interesting than in the preceding examples, and attention has been given to natural phrasing so that groups of words belong together and can be learned together. This lesson lacks, however, many of the elements especially conducive to good reading habits.

Come and see my garden bed,
See my flowers, blue and red.

See my garden bed.
See my red flowers.
See my blue flowers.

Come! See my blue and red flowers.

Come and see my garden.

Come! See my garden bed.

See my flowers!

See my blue flowers and my red flowers.

Come and see my garden bed.

Come and see! Come and see!

See my blue and red garden bed.

The "story" which follows the couplet is clearly practice material contrived for the purpose of wringing every possible recombination of words and phrases out of those contained in the couplet. Nine different words are made to serve as the vehicle for a page containing a total of seventy-one words, and a single small idea is spread so thin that there is no forward-impelling sequence in the relation of the short sentences. The selection can be read backwards just as well as forwards; that is, the sentences may be read in reverse order without impairing the sense at all. Alternate lines may be omitted altogether, or sentences may be thrown into any random order you choose for oral reading, and your audience will not know the difference. This shows, of course, a very inferior kind of organization, and it seems clear that the higher reading habits are being greatly subordinated to the lower.

UNDUE INSISTENCE ON THOROUGHNESS MAY IMPEDE PROGRESS

The notion that five or ten words must be known *perfectly* in a very narrow setting before a child may be permitted to go forward and encounter any more words is the cause of much of this wearisome reiteration. Those who hold this view have left out of account two important considerations: first, that repetition with variety is better than monotonous repetition because attention is stronger, and, second, that out of multiple associations the right reaction is more likely to come than from a single association. To illustrate the last point -- if the word *blue* is associated with *sky*, *flag*, *dress*, *bird*, *sled*, *Boy Blue*, etc., in interesting relations, it is more likely to be recognized and remembered than if linked up with *flowers* only. Any method which requires intensive and protracted work on a very small number of words, and forbids the introduction of new and stimulating ideas until

these are perfectly mastered, is undoubtedly sacrificing higher values to a wrong conception of thoroughness. It may be that mere word-acquisition also progresses at a slower pace than is necessary.

Compare with the above selections the following simple version of a popular old folk-tale intended for early use with beginning classes:

An old woman found a sixpence.
She wanted a pig.
She said,
 "I can get a pig.
 I can get a pig with the sixpence."
And she did.

The pig came to a stile.
The old woman said,
 "Pig, pig, get over the stile."
The pig said,
 "I won't get over the stile."
And he ran away.¹

Here we have repetition, which is an inherent part of the literary structure. The language approximates that in everyday use; there is sequence and consequence in the events; and this closely knit structure is an aid not only to thinking about what is read, but to the more automatic responses included in the reading process. This selection cannot be read backwards nor can whole phrases and sentences be omitted. There are many clues and cues (to use Huey's expression) which aid in quick recognition, such as: characteristic word-forms of different length to catch the eye; as, *sixpence*, *woman*, *stile*, *pig*, etc.; idiomatic word-groups or phrases; an inevitable sequence of events; for many pupils, a previous acquaintance with the story; opportunity for thought-conveying illustrations. Such features help atten-

*¹ Free and Treadwell: *Reading-Literature Primer*. Row, Peterson & Co.

tion to move forward securely across the line of print and favor the habit of reading in larger units.

Even where excellent stories of this type are used, some textbooks follow them up with a quantity of drill material using the same vocabulary. A story is twisted and turned, chopped up and retold in a wearisome manner, the intention being to insure the instant recognition of every word and phrase in a changed relation before a new story is taken up. Such an exaction soon converts a good story into practice material more objectionable, if possible, than that cited above. Where this plan is followed, it is quite common to spend six weeks or more in drill (usually twice a day) on the vocabulary of one story, recast with such inane reiteration as the following:¹

"I can get a pig," said the woman.
Said the old woman, "I can get a pig."
"With a sixpence, I can get a pig."
She did get a pig.
She did get a pig, with a sixpence.
The old woman came to a stile.
The pig came to a stile.
The old woman and the pig came to a stile.
Etc., etc.

This dull repetition is quite unnecessary, since good story material can always be approached from some new angle. Suppose the story in the textbook is "The Gingerbread Boy." At the time the children are working on this story, the making of gingerbread boys becomes a popular enterprise and simple accounts of the associated activities offer abundant repetition for a large part of the vocabulary.

If a domestic science laboratory is available, primary teachers often plan and put through the actual baking of

¹ Since the original form of "The Old Woman and the Pig" was taken from the Free and Treadwell *Primer*, it should be stated that this garbled version does not come from that book.

enough cookies for the class. The children work with the teacher in small committees helping to mix, roll out, and cut the cookies. As a part of the experience such reading matter as the following is evolved:

We are going to make gingerbread boys.

We will make thirty boys.

We will cut them out

and put them in the pans.

Miss will put the pans

in the oven.

Our gingerbread boys cannot run away.

We made gingerbread boys today.

We made thirty gingerbread boys.

We cut them out.

We put them into pans.

Miss put the pans in the oven.

She took the pans out.

Our gingerbread boys did not run away.

My boy is brown.

He is a good gingerbread boy.

I am going to eat you, gingerbread boy.

If the actual baking of cookies is not feasible, the story may be told in the sand box and certain features may be described in language and reading exercises. For example:

I made a clay boy.

He looks like the gingerbread boy.

I made a clay dog, and a cat

and a fox.

I made a road in the sand.

John made a house of blocks.

A little old woman and a little old man

live in the house.

The gingerbread boy is running away.

Etc., etc.

AVOIDANCE OF ALL ANALYSIS AND DRILL MAY LEAD TO INEFFICIENT HABITS

The desire to avoid a rigid and narrow procedure and the belief that "thoroughness" is often overdone has led in some quarters to a practical abandonment of any kind of orderly and definite plan for teaching beginning reading. An easy-going optimism seems to say that if enough attractive, easy books are placed before children, and if other skillful stimulation is furnished, they will find their way into the art chiefly through memorization of stories and repeated location of words. There is no evidence that the majority of beginners will make normal and sure progress in acquiring the various controls essential to good reading habits without very careful and intelligent guidance and training. On the other hand, there is a good deal of evidence that long-continued use of a one-sided method such as children are likely to stumble upon often sets up a kind of eye-movement quite unlike that of the efficient reader and gives a misconception regarding the reading process very hard to correct.

A misapplication of the principle of pupil initiative in beginning reading and the premature emphasis on choice on the part of young pupils invite disaster also. The desire to read orally in a social situation may stimulate a child to choose and to drill himself upon a selection which he is not at all ready for and which he cannot in any true sense read. The teacher, the mother, or a more advanced pupil hears the child practice the selection a number of times until he is ready to offer it before the group. • The story or poem is practically memorized and few of the separate words are really known. If this goes on for long without adequate training in word-recognition, phrase-reading, and following the printed line in the correct manner, there is a fair chance that the child will develop into a case calling for remedial

work. Pupils have been known to advance into the second half of the second year still under the delusion that memorization was the main element in reading.

IMPORTANT INDICATIONS OF RECENT EXPERIMENTS

A unique contribution to the question under discussion has been made by Guy T. Buswell¹ in an investigation described in Chapter III of the monograph previously mentioned. This chapter is called a "Detailed Analysis of First-Grade Reading." While the author disclaims belief that the experiments described have settled anything regarding relative merits of different methods of teaching beginning reading, certain *tendencies* of these methods are clearly indicated.

The experiment was with first-grade pupils from two schools in which different methods of teaching beginning reading were employed. One class was in the Chicago University Elementary School and the other was in a neighboring public school.

The essential points of contrast between the two methods are as follows: The public school emphasized word-analysis and recognition above everything else, giving a very large amount of drill in this element. It attempted to stimulate an attitude of interest toward the selection to be read, but not by telling it in the words of the text. The University School placed the chief emphasis upon securing a correct reading attitude by which the child would look for the meanings in the selection. It did this by letting the child memorize the story before reading it. This was followed by phrase and word drill, but with much less attention to words than in the public school. The University School also gave more opportunity for silent study of the story to be read. In summary, the public school method emphasized *mastery of mechanics*; the University School emphasized the process of fusing the words and phrases into meaningful units.

¹ Buswell, Guy T.: *Fundamental Reading Habits: A Study of Their Development*. Supplementary Educational Monographs, no. 21, chap. III. The School Review and Elementary School Journal, June, 1922.

Photographs of the eye-movements of I B pupils in oral and silent reading were taken during the seventh, thirteenth, and seventeenth weeks of the school year. Similar records of the I A pupils, made at the same time, represented a school experience of twenty-five, thirty-one, and thirty-five weeks. A dictaphone was used in connection with oral reading, and this instrument gave clear evidence regarding all hesitations, omissions, miscalled words, and substitutions, as well as the degree of rhythmic phrasing attained. The full analysis and graphic representation of these records is very interesting and significant. The following passage gives a brief summary of results:¹

By means of these detailed case analyses the immediate outcomes of two contrasting methods have been shown. If the primary emphasis is placed upon word-recognition, the outcome is the ability to follow the printed lines, to pronounce all the words, but to display no vital concern for the content. It produces what is familiarly called word-reading. This is not the complete attitude of the mature reader. The method goes far in the development of word-recognition, an element which all pupils must ultimately develop. It leaves much to be done in securing an attitude of reading by thought wholes.

On the other hand, when the chief emphasis is placed upon the thought and the story is memorized, the pupils do develop a vital concern for the content, but develop more slowly in word-recognition and in ability to follow the lines.

Neither method should be judged by the outcomes at the end of the first semester. The purpose of analysis is to indicate that the two methods start out by different routes, one emphasizing words, the other emphasizing content. Ultimately the pupils must become mature in both. The important fact is that the teacher recognize that the adoption of either method means the carrying over of the undeveloped elements to a higher level in school. The selection of a method resolves itself into a question of which elements shall be developed first and what shall be the rate of development. Ultimately all the fundamental elements must be carried to maturity.

¹ *Op. cit.*, p. 72.

WHAT SERVICE SHOULD PHONIC EXERCISES RENDER?

There has been much discussion of the question "Phonics or no phonics?" in teaching reading. For schools in general, probably the more valid questions are, What phonics should be taught? and when? and how? Few people believe that no training whatever should be given in word-analysis and in the sound values of letters and other phonograms. Those who argue that children of an earlier period learned to read by the alphabet method without phonetic drill forget that contemporary with this method was the speller with its *a-b, ab; e-b, eb; i-b, ib*; etc. And those who claim that children learn to read wholly by the unanalyzed recognition of words and phrases in extensive reading have in mind individual children and small selected groups rather than large mixed classes. The fact is that these children who are said to learn to read without phonics have simply been unusually clever in learning the fundamentals of English sound structure. They have done alone what most children need some aid to accomplish economically. The fact, however, that a considerable number of children do make many of these deductions almost unconsciously, and get very early a working knowledge of phonics, ought to cause us to look with some suspicion on highly elaborate and long-drawn-out schemes for systematic drill. Without doubt large numbers of children are being subjected daily to these logically detailed systems who would do better in the long run if the mechanics were much reduced. While there is little evidence that attention to mechanics can be entirely dispensed with, there is much reliable evidence that a high level of well-balanced attainment can be secured with a very moderate amount of this type of instruction.

All work in phonics should be deferred until children have a clear conception of the function of printed words and

sentences. They should be able to use this new skill in really getting thought from blackboard lessons, charts, cards, signs, and the first half of primers, before any step is taken to attract attention to more minute elements.

Any method which does not allow in the beginning an extensive acquaintance with word-wholes encountered in meaningful context is forced to confront young children with long lists of quite meaningless words for the sole purpose of picking them to pieces. The newest and most exploited phonic systems, as well as the old, offer for drill such words as *jib, cud, bond, hilt, nape, fad, fume, mete, dote, rim, quell, quip, boon, mood, yam, lux, quench, prim, brig, squills, mute, wend, woe, moat, cloy, loin, foil, punt, gram, brash, lush, bane, wen, mode*, etc.

Analytical work should not be done for its own sake; no word or practice should be introduced for the sake of the system, a common defect of most phonetic practices.¹

With a little delay and moderation, school life (including experience with books) will furnish plenty of familiar and significant words for necessary analysis and classification.

It is generally conceded by those who have made the most searching investigation that consciousness of the mechanics involved actually interferes with the reading process. Judd² says: "Mechanical training does, indeed, temporarily prevent the pupil from understanding the meaning of passages. Mechanical training would not be justified if distractions could be avoided by ready recognition of words."

Incorrect or exaggerated sounding of words, and drill out of proportion to use in thoughtful reading, tend to set up

¹ Gates, Arthur L.: *The Psychology of Reading and Spelling with Special Reference to Disability*, p. 45. Teachers College, Columbia University, 1922.

² Judd, Charles H.: *Reading: Its Nature and Development*. Supplementary Educational Monographs, vol. II, no. 4.

useless and abnormal reactions of speech organs in both oral and silent reading. The tendency to lip-reading is especially strong in children overtrained and badly trained in phonics.

In a recent investigation of reading disability Dr. Gates¹ sums up some of these undesirable results:

Inappropriate forms of phonic, phonetic, or other types of analytical training result frequently in unfavorable types of perception and in other ineffective habits. For example:

- a. Super-sufficient reaction to details of words, resulting in slow, laborious reading, in a variety of errors, in inability to grasp sufficiently large units of words, and in inability to attack long words effectively.
- b. Placement of emphasis on wrong characteristics of words, or dividing words in ways ineffective for ready recognition.
- c. Progressing by too small units which may lead to inappropriate habits of eye movements.
- d. Habits of too explicit articulation which may lead to an inhibition of the development of speed in silent reading.
- e. Habits of reacting primarily by efforts to pronounce accurately which may lead to inadequacy of comprehension.
- f. Habits of not looking ahead in reading, i.e., too narrow eye-voice span.

There are systems of teaching reading which rest almost wholly upon an elaborate and exhaustive training in phonics. There are other methods which greatly subordinate the phonic work and present very gradually the most fundamental elements as means toward getting control over worth-while reading matter. It is a noticeable fact that, in those centers which have been most influenced by the numerous scientific contributions to the teaching of reading, phonic work is of the latter type.

There is one important phase of phonic work which receives, as a rule, very little attention either in theory or in practice. The great service of proper exercises in developing

¹ Gates, A. L.: *Op. cit.*, p. 90.

pleasing tone, proper breath control, clear, clean-cut enunciation, and correct pronunciation is almost completely lost sight of in the constant agitation regarding phonics as a means of teaching reading. There is much to be learned which would benefit normal children from a study of correctional work in speech defects. It should be the aim of teachers of normal children to eradicate by proper exercise those defects which are due to easily controlled causes. Gesell¹ offers some very helpful suggestions for this type of phonetic work with normal children.

WHAT IS THE RELATIVE IMPORTANCE OF SILENT READING IN FIRST AND SECOND GRADES?

Reasons for the present emphasis on silent reading from the fourth grade on have been forcibly presented in numerous recent discussions of the subject. Many experiments and investigations have been made and ample data have been presented to show conclusively that silent reading is more efficient in every way than oral. It is now quite generally understood and accepted that much time has been wasted in drilling upper-grade pupils in oral reading, and the tendency, therefore, is to give much careful training in silent reading, since that is the type chiefly called for in daily life.

To what extent should the work of the lower grades be influenced by this movement? Are there differences in conditions and needs in the early stages of the reading process which call for different evaluation of oral and silent reading?

It seems that many of the arguments that have influenced the present trend in upper-grade reading are not valid for the earlier stages. We will examine some of these points.

1. *Silent reading is more rapid than oral.*

This only begins to be true at about third grade. Ac-

¹ Gesell, A. L. and B. C.: *The Normal Child and Primary Education*.

cording to Gray's summary¹ of various investigations, "The rate of silent reading surpasses the rate of oral reading between the second and fourth grades."

Stone² says:

The rate of oral reading is necessarily limited by the muscular activities involved in articulating and pronouncing, while silent reading has no such limitation. In the primary grades the rate at which the pupil can interpret the meaning of the symbols is not greater, and sometimes even less, than the rate of vocalization in oral reading. But some place in the development of the child's reading ability, probably about the end of the third grade with the average pupil, the rate at which the pupil can comprehend in silent reading exceeds his articulation rate in oral reading.

It has been found that in the main pupils who do well in oral reading do well in silent reading. This probably means that the development of smooth, fluent oral reading in the primary grades is an important aid in the development of proper eye-movement habits in silent reading.

2. *The eye-voice span is shorter in oral reading than is the span of recognition in silent reading, hence there are more fixation pauses. In consequence oral reading tends to set up ineffective eye-movement habits.*

Again, this does not seem to be an important factor below fourth grade. Dr. Buswell's³ figures show how slight is the difference through third grade. The present writer has combined Dr. Buswell's "Grade Medians for Eye-Movements" so as to make a closer comparison of rate, etc., in silent and oral reading. Only the data for grades I B to IV A inclusive are used here, although the authority quoted gives the facts for each school grade.

¹ Gray, W. S.: "Principles of Method in Reading." N.S.S.E. *Eighteenth Yearbook*, part II, p. 41. Public School Publishing Company, 1922.

² Stone, C. R.: *Silent and Oral Reading*. pp. 24, 25. Houghton Mifflin Company, 1922.

* ³ *Op. cit.*, pp. 109 and 135.

TABLE VII. GRADE MEDIAN FOR EYE-MOVEMENTS
Average number of fixations per line in silent and oral reading

	I B	I A	II A	III A	IV A
Silent Reading	18.6	15.5	10.7	8.9	7.3
Oral Reading	16	14.5	12	10.4	10.3

The above table means that median I B pupils averaged 18.6 eye-pauses per line when reading silently and 16 eye-pauses per line when reading orally. It will be noted that the showing in this respect is better for oral than for silent reading in Grades I B and I A, and that silent reading has a slight advantage in Grades II A and III A and a considerable advantage in Grade IV A. There is a steady improvement in the function in both types of reading from the second grade on.

TABLE VIII
Average duration of fixations in silent and oral reading

	I B	I A	II A	III A	IV A
Silent Reading	16.5	10.8	9.1	7.9	6.7
Oral Reading	19.2	12.8	9.8	10.1	7.7

In the above table, length of fixations are expressed in twenty-fifths of a second. That is, the average duration of eye-pause for median pupils in Grade I B was 16.5 twenty-fifths of a second in silent reading and 19.2 twenty-fifths of a second in oral reading. The advantage of silent over oral in this respect is slight even in fourth grade, 6.7 for the former and 7.7 for the latter.

Any one sufficiently interested in the evidence to consult the original monograph will find that, in the matter of regressive eye-movements, silent reading is not superior to

oral in grades below the fourth. By regressive movements is meant movements and fixations backward along the line to pick up the thread of thought, to correct or verify an impression, or to puzzle out some difficulty.

The material used in these reading tests had an average of almost exactly nine words per line for all grades. A glance at Table VII shows that in all primary grades the median number of eye-pauses per line is equal to or greater than the number of words per line. That is, *on the average*, pupils up to and including third grade, fixate on every word and fixate more than once on some words whether reading silently or orally. So long as the learner is at this stage, probably just as effective help can be given through oral as through silent exercise.

There are other reasons, however, why silent reading should receive a fair amount of attention in lower primary grades.

1. The real significance of the art of reading is impressed when beginners see that eye and mind unaided by voice can get from the printed page directions, instructions, and interesting ideas.
2. Means of self-help can be provided in silent reading better than in oral.
3. In group work, all the children can be more active all the time in silent than in oral reading. Exercises in quick recognition are easy to conduct insuring alert concerted effort.
4. Children need *training* in silent reading since the latter should not be like oral reading merely rendered inarticulate. Lip movements can only be suppressed through properly directed silent reading.
5. After good habits have been started, silent reading offers the best means for children to advance at their individual rate.

Sources of good material for silent reading are mentioned in the next chapter and in the Appendix, but no one need

depend entirely on published material. Any alert and thoughtful teacher can easily produce exercises for beginners especially well suited to her own pupils. Some of the Horace Mann teachers are using what the children call their "Study Book." This is a blank book or a loose-leaf book in which are inserted printed questions or directions which the children are to read and respond to in the appropriate manner. Some of these call for pictures to be drawn or colored and

Make a picture of the old woman's home.



FIG. 22. AN EXERCISE IN SILENT READING

This is one of a series of directions relating to a story the children are reading. They are expected to read the direction silently, ask no questions, make no comments, but draw a suitable picture. The printing was done by the teacher using Superior Type Outfit No. 17.

others call for cut-out parts to be arranged and pasted. When the children have learned to write or print, questions requiring a few words in reply are included. Figs. 21 and 22 show examples of this home-made material taken from the book of a first-grade child.

Did Grandfather give the Twins some rabbits?	Yes
Did Mother tell them to keep them in a pen?	Yes
Did the rabbits always stay in the pen?	No
Did Mother ever see the rabbits again?	No
Did the twins break the clothes basket?	No
Did Mother fall into the clothes basket?	Yes
Did the rabbits eat some of the vegetables?	Yes

FIG. 23. AN EXERCISE IN SILENT READING

The questions are on a certain part of *The Dutch Twins Primer*. They were given to advanced first-grade pupils who had learned to print YES and NO. The questions were printed by the teacher, who used in this case a typewriter having extra large type. In the above figure, this type is much reduced in size.

VARIED PURPOSES IN READING SHOULD BE MET

Considering the varied uses to which the art of reading is put as soon as a fair degree of skill is obtained, it seems unwise to limit to the field of literature the material used in the first two school years. We read both for pleasure and for information, and our pleasure-reading is not all of one kind or, at least, it should not be so narrowly chosen. But since so many good literature reading texts have been supplied, there seems to be a very strong tendency to neglect all other types of reading matter during the early primary years. No

one doubts the keen interest which almost all children have in the best fairy- and folk-tales, but this is not an exclusive taste and they enjoy also stories of other children or realistic stories. They like also to make records of their own doings either for future reference or to take home to read to others. These home-made stories may be the forerunner of informational reading in higher grades along the line of science, history, and current events. Many successful teachers secure a good part of their reading matter for the first eight or ten weeks from accounts composed by the children of the many interesting and valuable activities in which they are engaged from day to day. Here are three pages of a treasured book made by first-grade children. The repetition and cadence in the third selection make it particularly suitable as an early reading exercise.

On the Way to the Farm

We crossed the Hudson River.
We passed some beautiful woods.
We wanted to gather leaves.
We passed a field full of cows.



FIG. 24. A FARM EXPERIENCE, FIRST GRADE, HORACE MANN SCHOOL

THE PRIMARY SCHOOL

We passed fields of corn.
 The corn was turning brown.
 We saw a large house.
 Then we were at the farm.

The Animals

We went into the barn.
 We saw the big horses.
 We gave them hay.
 We went up into the hay loft.
 We went to the pig pen.
 We saw the fat pigs.
 We fed the hens and ducks.
 They all help the farmer.
 He helps us.
 He sends us food.

We have been out
 in the garden to-day,
 Gathering flowers,
 Gathering flowers,
 We have been out
 in the garden to-day.



FIG. 25. IN A GARDEN, FIRST GRADE, HORACE MANN SCHOOL

We have been out
in the garden to-day,
Gathering seeds,
Gathering seeds,
We have been out
in the garden to-day.

The following is part of the record of rich play-work experiences in the first grade, Horace Mann School, Miss Agnes Burke, teacher. One feature was the pleasing little booklets which contained accounts of the activities, with snapshot illustrations. The teacher printed the stories using Superior Type Outfit. (See Appendix.)



FIG. 26. A PLAYHOUSE BUILT OF FLOOR BLOCK FIRST GRADE,
HORACE MANN SCHOOL

Our Playhouse

We made our house.
Do you like it?
William made the cupboard.
Gibson and Walter made the window box.
George made the table.
The boys made four chairs out of boxes.
The girls made the curtains.
We like to play in our house.



**FIG. 27. A TROLLEY CAR BUILT OF FLOOR BLOCKS, FIRST GRADE,
HORACE MANN SCHOOL.**

Stop! Look! Listen!
 Here comes the car.
 Keep off the track
 or you will get hurt.

The first grade in the State Normal School at Platteville, Wisconsin, made two delightfully childish little books containing very easy statements about group experiences. Miss Edith H. Norton was the supervising teacher. Under appropriate snapshot pictures were the following captions typewritten by the teacher, selected, matched with picture, and pasted by the children.

The boys of the First Grade.

The girls of the First Grade.

The teachers of the First Grade.

Boys and girls like to see-saw.

Boys and girls like to swing.

We all like to slide.

On the cover is a crude silhouette cutting of children on a see-saw, and the title "My First Book." This was evidently printed by the children with small Price and Sign Marker Outfit.

Equally simple and satisfactory is the other book made by Miss Norton's children, which they call "My Farm Book." It tells by means of snapshots and typewritten slips about various experiences on a trip to a farm.



FIG. 28. AN EXCURSION, FIRST GRADE, PLATTEVILLE, WISCONSIN, NORMAL SCHOOL.

Looking at the Pigs

We like the pigs.

The pigs eat corn.

The pigs grunt when they eat.



FIG. 29. AN EXCURSION, FIRST GRADE, PLATTEVILLE, WISCONSIN,
NORMAL SCHOOL

Feeding the Chickens

The chickens like corn.

They like worms.

The chickens give us eggs.

The daily bulletin is a valuable adjunct in teaching reading. The teacher uses it as a means of real communication, and the children soon learn to look at a certain spot in the room when they enter, expecting to find some interesting bit of news, a word of special greeting, or some necessary instruction. When Miss Gail Harrison taught the first grade at the Lincoln School of Teachers College, she accomplished a very large part of the early work in reading through the extensive use of this means of communication and record. A little group might have been seen any morning standing in front of blackboard or bulletin board on one or the other of which some message was to be found. Often there was a dashing picture drawn or a bright cut-out picture posted as

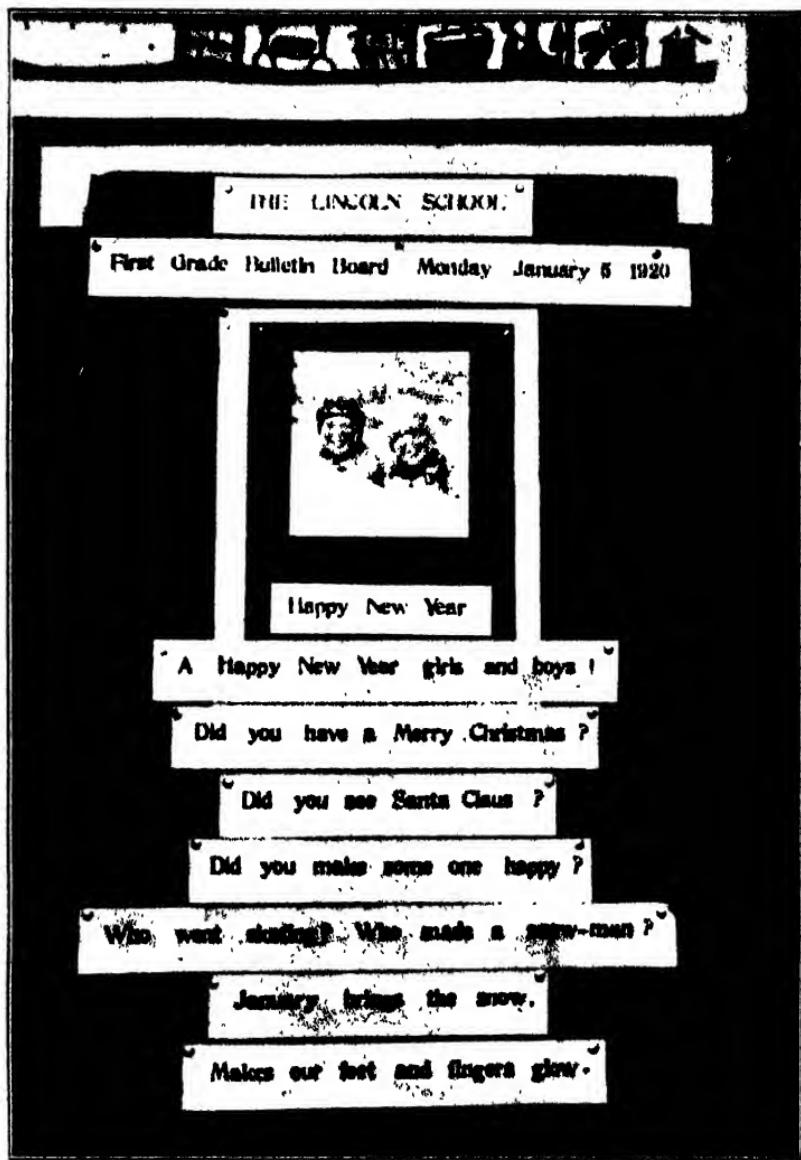


FIG. 30. A BULLETIN BOARD, FIRST GRADE, THE LINCOLN SCHOOL OF TEACHERS COLLEGE

Much of the early work in reading centers about topics of immediate interest presented on the bulletin board.

a part of the news. On page 227 is a photograph of one of Miss Harrison's bulletins. This one was composed of separate printed strips, this means serving well to aid in mastering a part at a time.

Progressive teachers have used such material for many years, and the practice ought not to be neglected simply because writers and publishers are supplying us with superior books. The fact that the children have participated in the events described, that they are thoroughly familiar with the subject, and are themselves joint authors in the composition, not only adds interest to the reading, but facilitates the process and makes possible and safe the use of a larger vocabulary than would be advisable otherwise. It is possible to have a good deal of purposeful repetition in composing and reading records of this kind, and it is not difficult to duplicate to a considerable extent the vocabulary which pupils are meeting or will meet in their first books.

SOME SUITABLE MATERIAL MAY BE OBTAINED FROM A GOOD DAILY PAPER

Although the style, the type, and the content of newspapers are on the whole unsuited to children in primary grades, a close inspection from day to day reveals many incidents and bits of news which, when recast, are both appropriate and interesting. In some families the older members take pains to read aloud scraps of news to the younger ones, thus helping them to grow into a fuller understanding of a larger world of people and events. One who has not made this careful examination of a good daily paper for bits suited to children will be surprised at the yield.

Such material can be used in several ways. Occasionally good headlines may be clipped and pinned on the classroom bulletin board. Pupils will form the habit of looking at this board every morning and will make an effort to read the

"news." The teacher will provide most of this material. Here are a few appropriate headlines.

WEAR A POPPY TODAY

MOTHERS' DAY

BOYS' WEEK

GET OUT YOUR FLAGS

As a rule, however, items will need to be rewritten and greatly simplified for grades below the fourth. If the teacher has a typewriter at hand, the revised copy may be quickly run off and placed on the bulletin board. If this is not feasible, parts of the item as published may be read to the children and they may assist in retelling the story, the teacher writing or printing it on the board. If the story is of more than passing interest, she may feel that it is worth putting into more permanent form for reading again. For such duplication a typewriter having large primer type is the most satisfactory instrument, though a good hectograph will serve.

The following article (only a part of which is quoted) was taken from the *New York Times* in the spring of 1923. First- and second-grade teachers read it to their classes as published.

ELEPHANT VISITS CRIPPLED CHILDREN

Baby Marcella walks through hospital wards giving cheer and taking peanuts

CLOWNS AND MIDGETS, TOO

Knee Hi, tiny horse, comes upstairs with party to entertain little shut-ins

It isn't every hospital which can have an elephant walk right upstairs and around between the beds, eating peanuts and swinging

its trunk around. There aren't many elephants small enough to get in such a hospital. But yesterday Marcella, the gentlest of the baby elephants with the circus, went up with some clowns and midgets and the baby horse to pay a visit to the children of the Hospital for Ruptured and Crippled Children at 321 East Forty-Second Street.

A teacher in the advanced first grade secured through discussion the following simple account of the incident, and it was written on the board as the children contributed statements. She copied it later on the typewriter, pupils added lively and amusing illustrations and it became a favorite in the book of "original" stories compiled during the year.

A CIRCUS AT THE CHILDREN'S HOSPITAL

The circus is here.

There is a baby elephant called Marcella
and there is a tiny pony
called Knee Hi.

There are two clowns in the circus
and there are some wee men
and some wee women.

All the children want to go to the circus.
But there are some who are lame
and cannot go.

They are in a hospital.

Yesterday the baby elephant
and the pony went to the hospital.
The wee men and women
went in a tiny carriage.

Four ponies drew the carriage.
The clowns went too.

When they got to the hospital
Marcella and Knee Hi
went right into the elevator.

It was funny to see an elephant
and a pony in an elevator.
The elevator man took them
to the children's room.

Then a wee man led Knee Hi
from bed to bed.
Marcella went up to the beds, too.
The children patted Knee Hi
and gave him sugar.
They gave Marcella peanuts.
The clowns played with the children.
They played funny tricks.
It was a fine little circus
and the children had lots of fun.

RECOMMENDATIONS FOR A TEACHING PROCEDURE

1. Begin with reading matter having meaning and worth to the children. This may include directions, announcements, other information, original stories, rhymes and tales, etc., on blackboard, home-made charts, and "quick perception" cards.
2. By above means, build up vocabulary of one hundred to two hundred words which pupils recognize readily in any situation. In determining the vocabulary be guided largely by textbooks to be used first half-year.
3. Do not wait until this vocabulary is acquired before using a primer as children are eager to read from real books. Let experience in (1) prepare background for occasional use of primer before end of second month of regular work.
4. Read aloud to pupils letting them see the books from which stories and poems are taken.
5. Have as full and as good an assortment as possible of charming well-made picture books, primers, first readers, story books, collections of verse, etc.
6. Provide low bookshelves and a "library" table. Arrange so that individuals and small groups may go to

these books freely. Teach children how to use books. Try to start the "library habit."

7. Provide games, puzzles, cards for matching words and pictures, phonic building cards, and any other good material through which children may teach themselves somewhat.
8. Do not allow children to take books home and do not encourage children to "teach" each other until certain fundamentally important attitudes and habits have been well started. In providing this safeguard, however, one should be careful not to frustrate and disappoint the ambitious children. From time to time very easy material may be taken home to show what has been accomplished.
9. In advanced first grade, and later, have a separate period when pupils may read aloud to the group, selections which they have chosen and especially prepared. These selections should not be too difficult and in Grades I and II at least, time must be provided when teacher can guide in efficient study methods.
10. No word analysis until a good working vocabulary has been acquired. Then note and emphasize similarities and differences in words which pupils are meeting. Print words that are alike in some fundamental respect on blackboard or chart and keep before pupils, adding to list as new words are encountered. Review these.
Classify pupils as early as possible according to aptitude in this ability and refrain from drilling children who do not need it.
11. Do not try to hurry children in learning to read. If they are not mentally ready, undue pressure probably

does little to reduce the number of "failures" in the class. Time is well spent which goes toward preparing a background of active experience, acquaintance with books, and acquisition of larger active vocabulary.

12. Keep varied purposes of reading always in the foreground. Provide for social and individual purposes through training in both silent and oral reading.

QUESTIONS

1. Why is the claim that good results are obtained by a certain method of teaching reading not a sufficient basis for the uncritical acceptance of the method?
2. Why is it unreasonable to believe that some one method is better than any other known method for general use?
3. How do the content and organization of early reading material influence reading habits? Why are the "easy" selections on pages 203 and 204 really difficult?
4. Does the principle of thoroughness justify spending six weeks or more on one small story? What arguments against such a plan?
5. What are some wasteful and perhaps injurious practices in teaching phonics?
6. Would you be willing to have silent reading substituted very largely for oral reading in first and second grade? Give reasons for the position you take on this question.
7. What are the main points in favor of using children's own interesting experiences as subject-matter for reading?

CHAPTER XII

WHAT ARE THE REQUIREMENTS FOR LATER WORK IN READING?

It was a common attitude in the past regarding the teaching of reading, that no particular technique was called for beyond the second grade. This idea may not have been advocated in theory, but it was commonly acted on in practice. Until rather recently the demand for expertness in teaching fourth-grade reading, for example, has not been very prominent. Students in training, teachers in service, and instructors in methods courses would have found it difficult to mention for this grade specific skills to be developed and definite factors in teaching procedure. The notion was quite general that after children were well started, the chief requirement was to carry oral reading to fuller perfection, and that the way to do this was through extended practice in oral reading.

The contrast between the over-systematized and exacting demands which called for no independent thought on the part of teachers of beginning reading, and the vague expectation regarding the later work, is strikingly shown in the following paragraph from a city superintendent's report for 1914:

The distinct methods of instruction furnished to the teachers of the first two years give them most elaborately planned manuals for daily procedure. The ordinary, average, or new teacher can, by closely following the manual, produce excellent results. . . Little or no initiative or thoughtful planning is required of the teacher in the first two years — all is planned for her. Her duty is merely to follow along lines of given procedure. The excellent results continue into the third year from their own momentum; but in the

fourth year a distinct break is found, and the reason, I am convinced, is because the teacher is here thrown upon her own resources.

The more thoughtful and competent teachers strove to broaden the scope of reading, to develop an interest in reading and to help pupils to comprehend, interpret, and enjoy in fuller measure. They also tried to increase facility by enlarging the vocabulary in whatever way they could. But the ordinary teaching procedure was about as follows:

1. To present in advance all new words of the lesson.
2. Have them pronounced and perhaps defined or used in a sentence.
3. Drill on phonetic elements of especially difficult words.
4. Assignment, "Study this lesson."
5. Recitation proper. Pupils read orally in turn short passages to demonstrate degree of fluency attained.

The usual mode of study consisted in reviewing the new words and then reading silently straight through the selection. The pupil's purpose was to practice so that he might read the lesson without stumbling the next day. The more painstaking children often read the selection more than once at study-time and tried to make this silent reading approximate as nearly as possible the desired oral effect as to rate, emphasis, dramatic expression, etc. Teacher and children conceived of study as a sort of inaudible rehearsal for a public performance.

At the recitation period pupils read in turn, longer or shorter passages, and the teacher's activity centered largely in attempting to get better expression from the class.

We now know that there are problems belonging to this stage which are just as definite and important as those which concern the earlier steps. New needs and increased capacity of pupils call for changed technique and shift of emphasis in teaching. These problems have been suggested and clarified

by numerous and extensive studies in the psychology of the reading process and by attempts to interpret the results of achievement tests now widely used. The application of more intelligent methods of study has had its influence also.

SILENT READING MUST BE TAUGHT AND NOT LEFT TO CHANCE DEVELOPMENT

As soon as children have reached the stage where they can read more rapidly than they can articulate, practice in oral reading is no longer so efficient a means of further improvement. As already stated, this stage is commonly reached during the third or fourth grade. This indicates the wisdom of increasing at this time the amount of well-directed, intelligent silent reading.

Without special training many people have established for themselves excellent habits of silent reading with rapid rate and high degree of comprehension. We know that this is true because many adults possess such habits, although conscious training along this line is of very recent date. We may safely assume, therefore, that some of the young people of to-day will establish rhythmic eye-movements, a good rate, and quick comprehension as their elders did, largely through extensive silent reading impelled by interest. Mere quantity of silent reading, however, does not necessarily develop efficiency, though, other things being equal, one who reads much with eagerness and zest is likely to develop a better technique than one who reads little. Tests show that among children of similar school experience and approximately equal ability in other respects some have acquired excellent habits, some have an inefficient technique, and others have formed habits so detrimental as to call for remedial work.

It is our business to know what kind of habits are being formed before a child reaches the stage where remedial

measures are needed. It is a mistake to leave so much to the less direct effect of oral reading and the chance effect of undirected, unintelligent study. This policy probably results in a lower attainment for most pupils than is necessary. On this point Dr. Gates¹ says:

Most of us eased off in our learning of reading, writing, and many other school functions as soon as we safely could -- perhaps in the fifth or sixth grade -- and entrenched ourselves in a low-level performance, from which we have never emerged. Few people know how rapidly they read or write, how efficiently they memorize or solve arithmetic problems; few know when their improvement came to an end, or whether they have made any improvement in the last year or ten years. If you should now suddenly undertake to increase your speed of reading, it would be found disturbing and perhaps unpleasant for a time, the inevitable result of breaking up an old organization of habits to supplant them by new. But this is the only way in which more effective habits -- perfectly comfortable once habituated -- are attained.

Obviously the first step is to find out what level the children have reached in silent reading. Close observation and some crude testing will reveal a good deal. One simple procedure is about as follows: The teacher takes ten or twelve of her class at a time, seats them so she can see just what each one does, gives them all the same selection from new well-graded material, and directs them to read as rapidly as they can without loss of meaning. As they read, the teacher watches closely for signs of articulation, lip-movement, mechanical methods of keeping the place, and pronounced skipping. She lets them continue until the fastest readers have read several pages and then asks all to stop, mark the point reached, and close books. The children are given some quiet work to keep them occupied, and one at a time they are called to a part of the room out of hearing of the others.

¹ Gates, Arthur L.: *Psychology for Students of Education*, pp. 253-54. The Macmillan Company.

and questioned briefly on what they have read, the teacher using questions previously prepared. She notes the amount read by each child and the degree and kind of understanding displayed. A crude measure of a child's achievement in silent reading is thus obtained from his rate of reading and from the comprehension shown. The teacher's observation during the reading will often furnish a clue to the cause of inferior reading.

It is desirable, however, to get a more accurate measure of accomplishment, and this is now widely done, especially from third grade on, by the use of standardized tests. The nature, use, and relative merits of the various available tests will not be discussed here. Full information regarding them may be obtained from such books as *Silent and Oral Reading*, by C. R. Stone; *How to Measure in Education*, by W. A. McCall; and *A Guide to Educational Measurements*, by H. C. Hines.

THE CONSCIOUS COÖPERATION OF THE CHILDREN IS ESSENTIAL

We are interested in the significance of the tests to teacher and children and in the application of the results to problems of teaching and methods of study. Third-grade children are quite capable of understanding the purpose of tests in reading, and the meaning of the results. They should be told about the achievements desired and expected, the standard of attainment in their grade in other schools, and should be shown the graphs for their own class indicating where they stand in relation to the norm.

There are a few facts concerning the art of reading which they should be told in a very simple way. They can understand the main difference between oral and silent reading; that in oral reading we are obliged to pronounce every word, while in silent reading we should pronounce as few as possible; that it is possible to let the eye "run along" the

line of print faster than the words can be uttered; and that one can read more rapidly silently and yet understand and remember just as well or better. Children at this stage can readily understand the bad effect of pointing, lip-movement, articulation, and dawdling in silent reading, and most of them can be led by a skillful teacher to desire to eliminate these habits. They can see the advantage of reading by phrases, and with some training they are capable of telling whether in their silent reading they look at and inwardly pronounce every word.

In this attempt to make children more conscious as to objectives, the relative values of comprehension and speed must be made clear. The idea that the main purpose of reading is to get the thought should never be obscured, and they should not be stimulated to attempt a rate of reading which interferes with understanding and judgment.

DRILL ON MINOR PROCESSES VS. "THE DIRECT SYNTHETIC MODE OF ATTACK"

Normal children who are merely at an immature stage in learning to read should not be subjected to the sort of exercises often employed to correct bad habits already fixed. In remedial work of any kind an analytical attack is sometimes required. It may be necessary to break up a process into its parts in order to find out where the trouble lies and then drill on the several elements separately. This ought not to be necessary in normal progress from an imperfect to a more perfect control over a given function. There is some danger that this point will be lost sight of and that ingenious people will bestir themselves to invent material and exercises offering a sort of piecemeal training which is unnecessary except in special cases.

O'Brien¹ is skeptical as to the gain likely to accrue from

¹ O'Brien, John A.: *Silent Reading*, pp. 82-84. The Macmillan Company, 1921.

drill exercises devised to improve certain specific subsidiary processes isolated from the total reading process. He says:

On the general principle of psychology, that one learns to do a thing by actually doing it, it would seem logical to assume that one could learn to read rapidly by practice in rapid reading. In contrast with methods which analyze the reading complex into its main processes, and then devise types of training adapted to improve each of these specific processes separately, this may be said to be the direct synthetic mode of attack — training in the whole organized process of reading itself. This would seem to be the simplest and, at the same time, the most indispensable type of training.

In the case of the specialized type of training adapted to secure the improvement of a single specific process, such as visual span, or character of eye-movement, in the reading complex, there is always the possibility that the improvement effected under controlled circumstances may not be carried over into the actual reading situation, where the circumstances affecting the functioning of a single isolated process can no longer be controlled. This may be due, among other causes, to the change in the reading situation which produces a corresponding modification in the response; or it may be due to the simultaneous functioning of other processes in the complex which tend more or less to inhibit or otherwise to affect the mode of operation of the specific factor subjected to the specialized training. Thus, for example, training to increase the perceptual span by means of tachistoscopic exposures of single disconnected phrases may actually — at least in the case of children — succeed in enlarging the visual span for such a type of reading. But whether the visual span enlarged for that specific type of perception would carry over into a different situation, such as obtains in the reading of a selection of continuous closely related subject-matter, is uncertain.

For, in the latter case, the situation differs considerably from the former. The subject-matter is no longer divided into phrases adapted for perception in a single fixation, but has all the words closely following one another in a printed line. There is, furthermore, a central thread of thought running through the various phrases and sentences of the context, which furnishes meaning premonitions of the coming words and phrases, thus enabling them to be grasped in much less than the normal perception time. . . . The

well-nigh complete absence of these meaning premonitions in the reading of discrete words, or phrases, exposed serially by means of the tachistoscope, shows how radically one reading situation may differ from another. It illustrates, moreover, the difference in the factors which are called into play, as well as the difference in their mode of functioning in the interpretation of the printed symbols, according as the reading situation varies.

Considerations such as the above serve to emphasize the value of the direct method of attacking the problem of accelerating the rate of silent reading.

The scheme which O'Brien presents in Chapters IV, V, and VI calls for the use of reading matter calculated to arouse and sustain interest, but relatively easy in character. He provides for intensive training in three factors involved in silent reading which he designates as:

1. Training in rapid silent reading.
2. Training to decrease vocalization.
3. Training in perception.

These factors are not to be isolated from the total reading process, but emphasis is to be placed upon them one at a time. The procedure recommended is simple, direct, non-technical, and entirely independent of device and apparatus. It appeals to the intelligence of the children and consists largely in helping them to hold in consciousness for brief practice periods certain ideals regarding rate, comprehension, suppression of articulation, and length of perception span, and to put forth effort to attain these ideals.

The author just quoted shows also how ineffective is all such special practice if teachers do not at the same time use every effort to have children employ in all ordinary reading situations the habits that have been started or developed in the special work.

TRAINING IN SILENT READING THROUGH ESPECIALLY DEvised PRACTICE MATERIAL

Individual teachers have for some years been evolving various kinds of material which children may use for self-improvement in silent reading. Gradually some of these aids are becoming generally available either as features of regular published systems for teaching reading or as independent units offered on their own merits. Most of these inventions were intended to assist in the early steps in reading, but now in various quarters teachers are attempting to apply the same principle to more advanced work. At present most of the latter type of material is still in the home-made stage, but it is safe to predict that before long much that is good and much that is of doubtful value will be on the market.

Miss Jean Betzner, of the Horace Mann School, has worked out a large number of interesting exercises in silent reading. Most of them call for a considerable amount of thoughtful, intelligent, and independent reading. In order to follow the directions given, pupils have to read, think, judge, select, and organize. Practically all of Miss Betzner's sets have been made from old copies of good readers or other discarded books and from pictures combined with some hand printing. They have not been published and therefore are not available for general use.¹

Four of these sets suited to second grade will be described. Similar ideas could be adapted to third grade if desired, using more difficult material. Each set is contained in a large strong envelope, on the outside of which clear directions are printed for the children to read and follow.

¹ A description of part of this material appeared in *Horace Mann Studies*, in *Education* (1929), in an article by Miss Betzner. Teachers College, Columbia University.

Directions

There are eight sentences about the picture in this envelope. None of them is complete. See if you can complete them so that they make sense. The sentences are easy to find because they are all numbered.

The envelope contains a bright-colored picture of an outdoor scene showing an organ-grinder and monkey, two laughing children, and a dog. The incomplete sentences are printed on strips and are as follows:

1. In this picture there are three
2. In this picture there are two
3. It looks like a day
4. The dog looks as if he were afraid
5. The monkey is trying
6. The two children are
7. The monkey is dressed
8. The organ-grinder is smiling because the dog

The following words and phrases to be used to complete the sentences are printed on strips.

people	to be very polite
animals	laughing gaily
in summer	is afraid
of a monkey	very unhappy
	in a red coat and blue trousers

The author of this material always puts a "joker" in a set of this sort. By this is meant an extra card which cannot reasonably be used. This is done to require the children really to read every one of the cards down to the last instead of making the last selection by the sheer process of elimination. In this instance the extra card bears the phrase "very unhappy."

The cards are, of course, completely mixed up when a child takes the set.

II. Directions

Read the story and pick out the best name for it.

The envelope contains a leaf from the *Horace Mann Second Reader*,¹ pasted on a card. The page exposed tells a fable in the following form:

Once upon a time, a crab left the sea and went out upon the beach to warm himself in the sunshine.

Just then a fox came trotting along the beach, looking for something to eat.

When he saw the crab, he said to himself, "What good luck, to find a breakfast so easily." And he pounced upon the crab.

"Well," said the poor crab, as the fox seized him, "this comes of going where I had no business to be. I should have stayed in the water where I belonged."

"Very true, very true," said the fox, as he gobbled him up.

On separate slips are the following titles, only one of which can properly be used:

The Gentle Fox	A Good Business
The Wise Crab	The Foolish Crab
In the Water	The Blue Sea
The Crab's Family	Sunshine

III. Directions

Find the answer to these riddles.

The "riddles" used in this envelope are all taken from the *Riverside First Reader*,² pp. 86-91, and 119. They are all in rhyme.

Some of the answers are clipped from the book and pasted on cards. Others are printed by hand. An example is seen

¹ Hervey, W. L., and Hix, M.: *The Horace Mann Readers*. Longmans, Green & Co.

² Van Sickle, James H., and Seegmiller, Wilhelmina: *Riverside First Reader*. Houghton Mifflin Company.

in the poem, "What Season Is It?" two stanzas of which are given here:

When the brook begins to go
Rushing to the sea;
When the birds begin to sing,
And leaves bud on the tree —
What season is it?

When the leaf buds all have grown,
To make a leafy crown,
And leafy trees beside the brook
On leafy trees look down --
What season is it?

The answers, taken from the text, are:

When the brook begins to run to the sea, it is —.
When the trees have leafy green crowns it is —.

The missing words are printed on separate cards, by hand. There are many more riddles and answers similar to the above included in the set so that a good deal of reading takes place in getting the pairs together correctly.

IV. Directions

See if you can find the right description for each picture.

The envelope contains a set of nine charming pictures in color with ten descriptive paragraphs type written on separate cards. The same animal characters run through all of the pictures and there is much interesting detail. The descriptions must be read accurately in order to attach them to the proper picture. The presence of the "joker," a paragraph about the Green Forest which does not fit any picture, makes complete reading the more necessary.

Two sample paragraphs follow:

To go marketing, the little animals in the Green Forest have to ferry across the stream. Mother Rabbit has been shopping and is

now ready to start for home. Will Mr. Frog get there on time? The ferry boat is about to start.

Do you know what the little animals in the Green Forest use for light? Mother Rabbit has to have a new supply so she had to go to market for some new lamps. Where do they get their supply of fire-flies?

Miss Alice Hanthorn and Miss Merle M. Beattie have evolved a simple type of reading card called *Silent Reading Stories*.¹ This material has been published. The authors state that it is intended as "Seat-Work for Second and Third Grades."

To use these cards, it is only necessary that the children know in a general way twelve very familiar fables and folktales such as "The Hare and the Tortoise," "The Boy and the Wolf," "The Elves and the Shoemaker." Two leading characters of each story are pictured in silhouette and there are printed statements to be cut apart. These statements always fall into two distinct groups. To quote the authors' instructions:

Keep each story separate from all the other stories. Cut the pictures and sentences apart on the lines. Mix the sentences together.

Have the child place his silhouettes on his desk as though the characters were talking to each other. Each sentence represents something which one character is thinking or saying. . . . As the child reads a sentence he must decide to which character it belongs, and must place it under the proper silhouette. When all the sentences are separated the next step is to arrange them in their proper sequence.

This material is not like the ordinary "cut-up" story. The sentences are not taken from a particular version nor do they when combined form the full text. Therefore the cards

¹ Beattie, Merle M.: *Silent Reading Stories*. 421 South 15th Street,
Lincoln, Nebraska, 1923.

cannot be selected and arranged purely by recall of particular passages in sequence, but discrimination is constantly called for.

It seems to the present writer that to check this work for correctness would consume a good deal of time. This defect could easily be obviated by adding some distinguishing code symbol which would help the teacher to determine quickly whether sentences are in the proper column or not.

In evaluating all special exercises of this sort, it is important to keep in mind the purpose for which they are used. If the intention is to give extensive practice in reading, one should, of course, inquire, "How much reading does this exercise actually provide?" Many suggested devices for silent reading call for a maximum of drawing, coloring, sorting or arranging, and a minimum of reading.

If the intention is to furnish exercises calculated to build up good habits of silent reading, the time element is an important consideration. Children may dawdle and dream over work of this kind while the teacher is busy with another group. Without oversight there is no means of knowing whether they are reading at proper speed or not.

However, if a quantity of good exercises are provided, and if there is frequent supervision so that standards can be built up, there is no reason why children may not greatly benefit by independent work of the same kind.

WHAT IS THE PLACE OF ORAL READING IN UPPER PRIMARY GRADES?

With the present insistence on the importance of training in silent reading, shall oral reading be largely displaced, or has it a particular service to render?

It would seem that, after children have attained a fair mastery over the reading process, it should serve them for many social purposes in the school. Some of these purposes

will certainly call for oral reading. We ought never to get beyond the point where the pleasure of a delightful story or poem will be enhanced by reading it aloud — at least in part — to an appreciative hearer. Certain types of literature make a direct appeal to the ear and a large part of the charm is lost in silent reading. This is particularly true of poetry and of dramatic material whether in dialogue form or not. Humorous stories, too, gain in effect through the reaction of the quicker-witted members of a group.

Some selections from writers possessing distinct literary style should be studied and read aloud because many children will discover very little of the characteristic beauty and delight if left to more or less solitary reading. This applies to such stories as *Alice in Wonderland*, *Pinocchio*, *Uncle Remus*, and many of the tales by Hans C. Andersen, Frank Stockton, Rudyard Kipling, and Hugh Lofting.

The criticism is sometimes made that, as such material is pure literature, it should not be made to serve in the slightest degree for group practice, but should be used wholly for individual pleasure-reading. The answer to this is that oral reading can and should be so conducted as to enhance the pleasure for the greater number rather than detract from it. *Alice*, *Pinocchio*, *Dr. Dolittle*, should not be subjected to routine drill exercise or plodding re-reading for the mere purpose of giving every one a chance to read aloud. But a second or even a third reading of such books may under some circumstances prove more delightful and stimulating than the first. It is well that this is so, for with the fine library facilities now offered in many communities a large number of children are partially familiar with a good deal of the literature which belongs to a certain grade before they enter that grade. It is the rare child, however, who cannot get a fresh and a deeper enjoyment from reading a choice book again in a rich social situation.

NEW OBJECTIVES MAY CALL FOR THE RE-READING OF A CLASSIC

This can be illustrated by Lorenzini's *Pinocchio*. In this story, the scene changes frequently and there are many characters who appear and reappear at intervals. The quick succession of incidents, some of which at first seem to have very little to do with the development of the story, proves confusing to many children the first time they read the book. Many leading questions suggest themselves only when one has finished the story. It then becomes evident that certain earlier scenes and incidents had some special significance. It is a delight now to read again in order to answer a larger question, seek support for an opinion, make an interesting association or establish a continuity of events only vaguely noted at first.

Pinocchio is a little wooden marionette with a wooden head, no heart, rudimentary ears, and a cold-blooded determination to please himself at any cost. Through the ups and downs of his dramatic career, beguiled by picturesque enemies, and aided by faithful friends, he at last wins a boy's soul and body.

How did *Pinocchio* do this?

Can we trace every step as he rose toward boyhood and fell, and rose again?

What were some of his most wooden-headed notions?

What were his most heartless acts?

What was his first generous or faithful act?

At what point does the story say that *Pinocchio* "had really a good heart?"

When did you feel most sorry for him?

Who were *Pinocchio*'s true friends?

How did they show their friendship?

Let us look up the different appearances of his friends
The Talking Cricket and The Blue Fairy.

Who were his enemies?

Show how they misled him.

Could you prepare a marionette or puppet show which would tell a part of this story?

Which part would be the best for this?

THE CLASS LIBRARY

For extensive silent reading, library facilities of some sort are essential. This need is being met through the well-selected school library in charge of a librarian trained to work with children, through loan collections from the children's department of the local public library, and through the small choice room library. One or all of these means may be used as conditions dictate, but there is no doubt that for the younger children an attractive collection of books in the classroom is a great asset. Here may be met in embryo many of the stimulating experiences of the larger library and many highly important habits may be well begun. The sense of personal ownership, helping to select the books, perhaps the added delight of earning money to buy some of them, assisting in "running" the library — all these influences tend to give the children a keener realization of the importance of books. Extensive voluntary reading with considerable latitude for choice is dependent upon insuring in some way a fresh current of inviting material. This sort of reading also requires that some time be provided when children may handle and examine books, make trials for themselves, and settle down in a comfortable spot to enjoy the chosen book.

When the essentials just mentioned have been provided — suitable books, a free period for choice, and right physical conditions for reading, it remains for the teacher to devise ways of knowing how effectively the children read the books chosen. The "Library Hour" or "Book Club" (as de-

scribed in Chapter VI) reveal a good deal. At such times the teacher watches and notes carefully the manner of silent reading on the part of individuals; she asks a child to read part of a story to her; she makes notes of children who are attempting books which are too difficult as well as those who remain on too low a level. The children also are encouraged



FIG. 31. THE LIBRARY CORNER

Looking at picture books, and voluntary reading. First Grade, Horace Mann School. One of the best ways to stimulate a desire to read as well as to encourage the exercise of developing powers is to furnish a quiet comfortable corner and a good collection of books.

to keep simple records of their reading. These records may be in the form of a card file, each child placing a slip in the file next to his name card, giving the title of the book he is reading with the date when begun and the date when finished. A still simpler record is in the form of a large wall chart blocked off into as many spaces as there are children in the room. Here the teacher writes or prints in the proper space the titles of all books as the readers report their completion. This chart usually has some pleasing and suitable decoration applied by the pupils and some such heading as, **BOOKS I HAVE READ.**

THE PRIMARY SCHOOL

Below are individual lists of average children in third and fourth grades of the Horace Mann School. These lists were taken from the room charts in March, 1924. Not all these titles are in the approved book collections for these grades. The teachers are trying to develop a liking for the best without depriving the children of reasonably good things of their own selection.

A BOY'S LIST, THIRD GRADE

- Men Who Found America
- Winston Third Reader
- Merry Animal Tales
- The Japanese Twins
- Travelling Bears at Play
- Our Little Brown Cousin
- All About Johnnie Jones
- Animal Folk-Tales
- Peter Pan, for Little People
- The Story of Dr. Dolittle
- Little Polly Flinders
- More Russian Picture Tales
- Nature Myths of Many Lands
- Alice in Wonderland
- Picture Tales from the Russian
- Hollow Tree and Deep Woods Book
- My Very Own Fairy Tales
- American History for American Children
- Pinocchio

A GIRL'S LIST, FOURTH GRADE

- Robin Hood. Pyle
- The Story of Dr. Dolittle. Hugh Lofting
- The Voyages of Dr. Dolittle. Hugh Lofting
- Heidi. Spyri
- Black Beauty. Sewell
- Stories of Long Ago. Kupfer
- Bunny Brown and his Sister Sue
- Letters to his Children. Roosevelt
- Peter Pan
- John Martin's Book

Poems Every Child Should Know. Burt
Vinzi. Spyri
Robinson Crusoe. Baldwin edition
Sara Crewe. Burnett
Animal Story Book. Burgess

With classes of ordinary size it will be impossible for the teacher to verify all these statements and to test all voluntary reading for comprehension and appreciation, but all who are doing this kind of work agree that a generous amount of informal testing is necessary in order to be sure that good habits are being established. To this end a good plan is to prepare for each of the most important books a short series of leading questions. When a child reports that he has finished one of these books, the teacher at the earliest opportunity tries him out with the proper set of questions. In most cases the questions should be answered orally in a quick interview between teacher and child. Unlike the thought questions on Pinocchio which were intended to deepen understanding and appreciation, these are of a kind which can be answered in a few words by any child who has really read the book.

Below is a convenient form which may be multigraphed and kept ready for such tests, a separate sheet for each book. By checking the questions as a child replies, the teacher can judge how successful he has been in his independent reading. She will then be better prepared to guide his future reading.

Title. *Little Dog Ready.*

Author. Mabel F. Stryker.

Who kept Ready locked up?

How did Ready make his escape?

What remarkable thing always happened on June 21st?

What messengers were sent to find Dick's seashore home?

Who were Ready's first guides?

What did Ready do for Mother Swallow?

Why did the Sandpiper leave Ready?
Where was Dick when Ready got home?

Name —

Date —

Title. *The Snow Queen.*
Author. Hans C. Andersen.

What caused Kay to become so disagreeable?
Who took Kay away?
Who lived in the house in the cherry garden?
How did the Crows get Gerda into the Palace?
How far did the reindeer carry Gerda?
What was Kay doing when Gerda found him?
Who helped Kay and Gerda to get back home?

Name —

Date —

QUESTIONS

1. It used to be thought that no particular skill was required to teach reading above second grade. In contrast to this conception, mention some important matters of knowledge and types of skill which teachers in upper primary grades are now expected to possess.
2. O'Brien questions the value of much of the drill with "flash" cards containing phrases and sentences in teaching normal children who are merely immature in reading ability. What are the grounds for this doubt?
3. Examine the samples of material intended to provide practice in silent reading. What features do you consider good? What possible tendencies would need to be watched closely?
4. Should you be willing to give up almost all oral reading in primary grades? Is this step necessary in order to establish efficient habits in silent reading?
5. Mention some reasons why a certain amount of money might better be expended in securing some choice books for a class library rather than in the purchase of a new set of reading textbooks.
6. In what ways are children likely to need some guidance and oversight from time to time even in their more independent and voluntary reading?

CHAPTER XIII

HOW SHALL LITERATURE BE SELECTED AND USED?

LITERATURE is the most universally accessible of all the great arts. It may seem difficult if not impossible to give all children a full introduction to the best in music, painting, sculpture, dancing, and the drama, but a little enterprise and determination will secure for them the wealth of the ages in story and verse. There is just ground for complaint that our primary schools in many respects are poorly equipped and that superior teachers are greatly handicapped by lack of suitable materials and apparatus, but in the matter of literature a little money and a little effort command so much that there is no excuse for an impoverished curriculum. Probably there is no subject in the usual elementary course of study which has been so greatly and so generally improved in recent years as that of literature. Trained librarians and literary people as well as specialists in childhood education have coöperated, editors and publishers have made available quantities of excellent books at relatively low cost, and steady progress has been made in training teachers to use this material effectively.

Not only is literature the most universally accessible of the arts, it is also the most universally understood and appreciated. Because it employs the language of daily life and because this language is used clearly and simply in all great literature, the immature can be reached by it and can catch its deepest message more fully than through any other art expression. Music often stirs deep feeling and desire, but for most people these responses are vague and indefinite. A beautiful picture catches a single fine conception, a single culminating moment in an experience, and the sensitive or

gifted get a complete and satisfying message from it. But considering all classes, all stages of development, all degrees of native ability, probably literature conveys the clearest meaning, affords the greatest delight.

We used to talk about stories and the story hour in the kindergarten and primary grades. It is well that these terms are rapidly disappearing in favor of the term *literature* as expressive of one great division of the curriculum. The latter term at once limits, defines, and dignifies what is to be offered. Applied intelligently and consistently, it excludes all that is cheap, trivial, and evanescent.

When we speak of selecting literature for the youngest children, we imply that this great realm of human inheritance is to be opened up to the children, and that from the earliest days in school they are to set their feet in a path which may lead steadily to college or university work in English literature. At least we indicate that the humblest citizen shall have a chance to taste of the best and finest which books have to offer. Poor adaptations and mutilated versions of fine tales, home-made verse, manufactured stories devised to convey special lessons — all these must give way when we set out to plan a rich course in literature for our schools, beginning with the kindergarten.

Does this sound pretentious and stilted? Does it suggest that children are to be fed upon an over-refined and too narrowly prescribed literary diet? If so, we have only to remember that the best in literature is usually the simplest and most direct, and that human thought and feeling have expressed themselves in an infinite variety of literary forms suited to all stages of mental life. Among these myriad forms, the old folk-rhymes and folk-tales are peculiarly well suited to the tastes and needs of the younger children.

**MOTHER GOOSE IS THE FIRST BOOK OF POETRY AND THE
FIRST BOOK OF KNOWLEDGE**

To recognize *Mother Goose* as *literature* is to take these old verses out of the purely nonsense, doggerel class where the unthinking have catalogued them and give them the place of dignity and worth which they deserve. So much has been written by competent critics setting forth the many merits of this old folk-verse that it might seem useless to discuss the subject further were it not for one fact. There is a strong and persistent tendency to formalize every subject and every activity as soon as great school systems adopt them; and folk-literature, including *Mother Goose*, seems in danger of being swallowed up by the one engulphing purpose of teaching children to read. It has become a very popular material for the first reading lessons, and in many classes the children's acquaintance with *Mother Goose* is limited to the selections which find their way into primers. Percival Chubb has pointed out eloquently and on many occasions the fundamental nature and value of the old songs, rhymes, ballads, and fragments of popular verse which have for over two hundred years appeared in various collections called *Mother Goose Rhymes*. In his lecture on "The Child as a Literary Personage,"¹ he says:

We have misunderstood literature - literature, more and more a thing of the eye for us; less and less a thing of the ear. This means that it is less and less a social interest, more and more a matter of individual and solitary enjoyment. We are corrupted by print, the victims of the cold black-and-white of the printed page. Literature through the ages has not been this; it has lived in the auditory memory and been transmitted by the voice. It has been a joy for the ear and the auditory's imagination. I, for one, would have it so still, especially the traditional literature

¹ An address given at the annual meeting of the I.K.U. in 1909 and published in the report for that year.

of childhood. . . . The child as a literary personage demands the literature of associated activity, in the composite forms of early literature; a literature of song, which is sung, of story which is embellished with musical values; of action which is acted.

It is no mere metaphor to say that *Mother Goose* should be the child's first "Book of Knowledge," his first "Natural History," his "Introduction to Sociology." Examine carefully any authentic and full collection of these old verses. A marvelous procession of human characters crosses the pages. The whole of society (the society of Old England at least) is assembled there in miniature — kings, queens, squires, ladies, farmers, shepherds, blacksmiths, cobblers, priests, fishermen, milkmaids, lady's-maids, stable-boys — all in a jolly, democratic *cameraderie*. They work and dance, laugh and mourn, hold converse together or go their several ways. And these ways lead into every kind of environment. We enter palace and hut, court and kitchen, church, market, shop, fair, mill, and inn; we visit city, village, farm, garden, seashore, lane, field, and stream; we dine upon bread, honey, milk, roast beef, fish, tarts, butter, cheese, pie, cake, and nuts, either sitting in state with King Cole or sharing a precarious supper with Tommy Tucker.

Mingled with this human procession or taking their way at their own pace and gait, what an assemblage of animals and birds! Notice how rare a thing in *Mother Goose* is a purely fabricated beast like the unicorn. With scarcely an exception the animals are the familiar domestic ones, and bird-life is represented by barnyard fowls and the most common birds of field and woodland. Babies and young city children may meet for the first time in the pages of *Mother Goose* some of the fascinating living creatures gathered there; cows, calves, sheep, lambs, horses, ponies, colts, and donkeys appear. Usually they play their ordinary but fascinating rôles as adjuncts to the normal life of man. Only

one cow jumps over the moon, and only one dog is known to have laughed visibly and audibly. Little children need not get distorted, erroneous ideas of the world about them from good old *Mother Goose*. There is a laugh on every page, but how much sanity and wisdom as well! Many story-rhymes are pure realism without a touch of the fantastic and impossible, but presented picturesquely, vividly, and with delicious humor. Such stories as *Boy Blue*, *Baa, Baa, Black Sheep*, *Miss Muffet*, *Jack Horner*, *Jack and Jill*, *Simple Simon*, *Lucy Locket*, *Polly Flinders*, *I had a Little Pony*, *Dance to your Daddy*, *Bye, Baby Bunting*, and a score of others, seem perfectly sensible and plausible. They are leaves right out of the book of child-life, and present a graphic record of the small joys, woes, accidents, escapades, folly, and wisdom of genuine child characters.

In this first "Book of Knowledge" we learn about making cake, shoeing horses, milking cows, shearing sheep, making cheese and butter, planting and reaping, grinding flour, fishing, tending garden, tending geese and chickens, washing clothes, bathing and dressing the baby, and a multitude of other homely tasks and industries.

Every kindergarten and every first and second grade should possess at least one excellent illustrated collection of *Mother Goose*. Good pictures add immensely to the value and delight of these rhymes, and proof of their essential charm and vitality is shown in the almost unprecedented array of superior artists who have been impelled to use their gifts in depicting the characters and scenes. Ralph Caldecott, Walter Crane, Kate Greenaway, Walter Rackham, Leslie Brooke, and other highly skilled artists have given enhanced humor, beauty, and meaning by their delightful illustrations, and so far as possible all children should have the benefit of their work.

Not only is there much of sound sense in *Mother Goose*;

there are also verses of great beauty. There are a few examples of fine lyrics which not only have the lilt and swing, belonging to the type, but exhibit also the other essential — beautiful poetic conceptions. Among these may be cited, *The North Wind doth Blow, I saw a Ship A-Sailing, My Maid Mary, Bless you, Bless you, Burnie Bee, and Rock-a-bye, Baby, Thy Cradle is Green.*

Children should know some of these nursery songs in the beautiful musical setting given by Elliot,¹ LeMair,² and others.

For younger children *Mother Goose* rhymes serve as admirable material for free, spontaneous, original dramatic representation. The plots are exceedingly simple, the dialogue brief or absent altogether, and the characters are so sharply drawn that little children can easily originate a dramatic representation closely akin to pantomime. Later, the powers of more mature and experienced pupils may have exercise in such a small drama as *The Queen of Hearts*, which requires several scenes to develop its fully rounded plot of "complication, climax, dénouement." A little more dialogue must be evolved, and there is ample opportunity for imagination to work creatively in depicting court life, manners, costumes, etc.

Here again we may deplore the present tendency, which is to dramatize these little stories solely as an adjunct to the reading lesson. When so used, aesthetic and creative qualities drop out entirely, for pupils must do the scene "just so," must say the lines "just so," in order to make action and words fit the exact mould laid down by manual and demonstrator. Deviation is to be avoided (say some advocates of particular reading methods) because changed order or omitted phrases will lead to confusion when pupils attempt to read the elaborated story as it appears in the primer. If

¹ Elliot, J. W.: *Mother Goose's Nursery Rhymes and Nursery Songs*.

² Le Mair, H. W.: *Our Old Nursery Rhymes*.

this procedure must be followed, we should at least give the children a freer rein by letting them dramatize many rhymes not contained in the readers.

What a pity it is to reduce this rich and charming world of song in primary grades to five or six selections thought to be especially well adapted to early practice and drill lessons in reading. Not only is this much too meager in amount, but the use of any literary material almost exclusively to impart the rudiments of reading technique practically insures that the characteristic intrinsic charm of the material will be sacrificed. Let us continue to use folk-verses and folk-tales as part of our reading matter for beginners, but let us see to it that they have also a full and delightful acquaintance with much that is beyond their ability to read.

Suspecting that general acquaintance with folk-verse is limited to about a dozen well-known titles, we tested a group of kindergarten-primary teachers to see what titles came most prominently to mind. Without previous warning and without recent reading or study of *Mother Goose*, ninety-seven young women taking a course in children's literature were asked to write down as rapidly as possible titles, or any identifying line, of *Mother Goose* rhymes in the order in which they came into their minds. They were given just two minutes in which to write.

The results of this experiment in brief were as follows: The largest number of titles given by any one was fourteen, the smallest was two. The total number of different rhymes named was one hundred and five. The frequency with which certain titles were mentioned ranged from one to fifty-one, the rhymes which were listed by fifty per cent of the class being *Miss Muffet* and *Jack and Jill*, with fifty-one "votes" each, and *Boy Blue*, with fifty out of a possible ninety-seven. *Jack Horner* was just below the fifty per cent mark, being found on forty-six lists.

So far as revealed by this test the following are the best-known rhymes; at least they are the selections most readily recalled by these particular people:

	<i>Times mentioned</i>
Miss Muffet	51
Jack and Jill	51
Boy Blue	50
Jack Horner	46
Old Mother Hubbard	43
Little Bo-peep	41
Hey, Diddle, Diddle	40
Humpty Dumpty	36
Mistress Mary	30
Hickory, Dickory, Dock	29
Baa, Baa, Black Sheep	28

Such charming verses as "I saw a ship a-sailing," and "Lady-bug, lady-bug," are mentioned only once each, and the picturesque little mariner, Bobby Shafto, is recalled by only two. "One misty, moisty morning" finds a place on two lists; "Pat-a-cake" on three; and "I had a little pony," on four.

Mrs. Babcock¹ examined twenty-four modern and popular primers and first readers to see to what extent primary children are introduced to folk-verse through their textbooks. In condensed form the results of this inquiry are as follows:

Number of books examined	24
Number of different rhymes found	63
Number of selections per book ranged from.	0 to 20
Median number per book	3

Rhymes most frequently included:

Little Boy Blue	in 10 books
Rock-a-bye, Baby	in 8 books
Pat-a-cake	in 5 books
Baa, Baa, Black Sheep	in 4 books
Once I Saw a Little Bird	in 4 books
Ding, Dong, Bell	in 4 books

¹ Mrs. H. T. Babcock. Unpublished paper, prepared in 1920 as part of a course in Children's Literature, Teachers College, Columbia University.

It does not necessarily follow that more verse of this sort should be included in textbooks for beginners in reading. The figures are offered here to show that the notion that primary pupils in general are getting a full acquaintance with this material through their readers is erroneous. *Mother Goose* is the child's first classic, and should be presented as worth while in itself, in a reasonably full collection, well bound and well illustrated.

ACQUAINTANCE WITH FOLK-TALES THROUGH TEXTBOOKS IN READING IS NOT SUFFICIENT

There is some danger that the choicest folk- and fairy-tales will be known to pupils in the lower grades only through impoverished versions which have been reduced to a vocabulary and a style suited to primers and first readers. This is not intended as a criticism of textbooks which contain these much-simplified stories, but is mentioned as the basis of a plea for giving children orally the very best versions of these stories and many others of the same type. The very excellence of some of these books as reading texts may cause teachers to overlook the necessity of offering a rich course in literature for its own sake. So much time may be spent on *The Little Red Hen*, *Chicken Little*, etc., as material for teaching reading, that the teacher will fail to give orally an abundance of equally good stories in better literary form.

Some systems of teaching reading require the verbatim memorization of stories as they appear in the text. Teachers are expected to tell these stories in the staccato sentences of the primer. Even kindergarten teachers, in an effort to "prepare" for reading, sometimes limit themselves in storytelling to the particular versions which will be encountered later in beginning reading. This seems an unduly restrictive and narrowly utilitarian policy. These simple, delightful old tales lend themselves admirably to the early steps in ac-

quiring the art of reading, but teachers need to be careful to present them also orally through reading to the class or telling them in the best obtainable versions.

Another result due to the tendency to subordinate literature to skill in reading is the overuse of the accumulative tale in the lower grades. In teaching reading, there is a peculiar advantage in employing such stories as *The Old Woman and her Pig*, *The Little Red Hen*, *The Gingerbread Boy*, *The Cat that Lost her Tail*, etc. There is, of course, intrinsic charm in such stories for young children, and they should become acquainted in one way or another with many of the best of this type. But there is no excuse for using this one pattern to such excess. It tends to keep children too long on an exceedingly obvious and chain-like form of plot, when they are quite mature enough intellectually to follow with understanding and delight stories having a somewhat more complex organization. They should have many folk- and fairy-tales of a type providing greater variety of events, with a less fortuitous and arbitrary sequence, with characters in more natural relation to each other. The thinking and the memorization called for in accumulative tales are based upon associations of the simplest, most obvious sort. In the "chain" story, one name and one event touch off by association another name, another event, in a mental process much like that involved in reciting the A, B, C's, whereas stories like *Sleeping Beauty*, *Cinderella*, *The House in the Wood*, *The Frog Prince*, *The Elves and the Shoemakers*, while constructed on simple dramatic lines, have different structural patterns. Mastery of such tales requires richer and more varied associations, since appreciation and recall must be secured through much more complete thought-processes.

Textbooks beyond the first reader, and even a few for that grade, contain to-day a wealth of these fine old tales in really excellent form. A goodly number of texts with their de-

lightful illustrations may be thought of as genuine story-books. But we should have also in the classroom collections of folk-tales never meant to be used as textbooks. Children should have an opportunity to handle and know intimately such books as Leslie Brooke's¹ *The Three Pigs*, *The Golden Goose Book*, and *Johnny Crow's Garden*; and Valery Carrick's *Picture Tales from the Russian*. The stories in such books are not reduced to terms suited for beginners' own reading, but they are admirably adapted to stimulating the desire to read, and they furnish the teacher with excellent versions of some of the old tales in language and style appropriate to read aloud to young pupils. For the reading of more advanced primary pupils there is an abundance of folk- and fairy-tales in beautiful illustrated editions as well as in the best textbooks. This phase of the subject is discussed in Chapter XI.

REALISTIC STORIES ARE NEEDED

The fact that such a very large percentage of the subject-matter of primary reading texts consists of folk-tales makes it the more important that the children be furnished through other channels with a varied program in literature. Few students of the subject would question the importance and fitness of fairy-tales in a course in literature for the primary school, but, although most children delight in such stories, they have also a lively interest in "true" stories. Too much weight has been attached to the commonly accepted dictum that interest in fairy-tales culminates at about the age of seven or eight years. Too little attention has been given to another line of interest exhibited by practically all children from a very early age — their delight in narratives dealing with the daily life of real people, young and old, of to-day and yesterday.

¹ See Appendix.

Without special effort, the offering in realistic stories will be too scant. There are relatively fewer stories of real life in children's books to-day than in those of fifty years ago, though what do appear are better in literary quality, less goody-goody, and unnatural. Because so few stories of this type are found in books intended for children to read and because they are so difficult for teachers to find for telling, it is safe to assert that the masses of children in school up to, and including, third grade, are getting very little fiction that does not involve more or less of the supernatural element. Too rarely do they have an opportunity to follow an interesting plot with real child characters, with setting and incidents true to life, developed with the fine imagination, taste, and skill of a literary artist. For primary grades there seems to be comparatively little that corresponds in character and quality with the offerings for older children, such as *The Secret Garden*, *Little Lord Fauntleroy*, *Understood Betsey*, *The Prince and the Pauper*, and *Tom Sawyer*.

Teachers should search through collections for good realistic stories to tell, should read aloud longer and more difficult ones, and should place in the children's hands as soon as possible such complete wholes as *All About Johnnie Jones*, *About Harriet*; *When Molly was Six*; *The Eskimo Twins*; *The Dutch Twins*; *Wee Ann*; and *The Snow Baby*.

Closely related to this class of stories and offering similar values are animal stories which *might* be true. By this, it is intended to distinguish them from the fairy-tale kind where animal characters talk, dress, and behave like human beings and have a disconcerting way of changing form and nature at their convenience. We shall disregard here the "nature-fakir" controversy. The children's library should include, of course, the most reliable and authoritative references regarding animals, birds, and insects, but there is no need to press too vigorously the exactions of science when discussing

literature. Surely there should be no hesitation in including fine stories in which animals are the leading characters and which are so written as to seem true to life to all readers except the most mature, experienced, and scientifically trained. Primary children should make the acquaintance of *Raggylug*, *Johnny Bear*, *Krag*, *Moufflou*, and *Black Beauty* — not as vehicles for conveying instruction in nature-lore, but as worthy examples of a type of fiction which appeals strongly to a dominant interest of the young and to sympathies which we wish to encourage.

MODERN FANCIFUL TALES SHOULD BE SELECTED WITH ESPECIAL CARE

The term *fanciful tale* is one often used to designate a large group of stories written in comparatively recent times as distinguished from the old anonymous folk- and fairy-tales which were "the product of the ages." The term is a comprehensive one sometimes loosely applied to all modern stories for children which are not strictly realistic or historical in character. Vast numbers of these stories have been published, and they are of all degrees of worth from zero to a quality which stamps them as genuine classics. The quantity is suspiciously voluminous, and that fact alone warns us to examine carefully into the quality of the product.

An outstanding trait of the great mass of these tales is their lack of balance and restraint. They employ many of the supernatural agencies and characters of the old tales — giants, fairies, elves, gnomes, etc. — and attempt to work their magic in similar ways, but there is a tendency to pile marvel upon marvel, to resort to the freakish and fantastic, the bizarre and preposterous. Many critics have pointed out that, while the old fairy-tale employs just enough magic to enable their very natural human characters to win out in their endeavors, many modern fairy-tales set no limit upon

the use of the supernatural. They have consequently little of the sincerity of the old tales, and rarely touch the emotions in any way except through the occasional appeal to a sense of humor. Most of these stories furnish only a momentary amusement. They are marked by the sophisticated inventiveness of their authors rather than by the creative imagination necessary to a real art product. Involved plot and inconsequential incidents make them difficult to follow, while intended symbolic import frequently further obscures whatever direct meaning the story might have. Quite often they are written in an attempt to convey a specific moral lesson or to carry propaganda of some sort, such as health, thrift, patriotism, and these purposes become paramount. Real literature is not created that way.

In searching for excellence in the great mass of fanciful tales, the novice at the task continues hopeful for some time that there will come to light true counterparts of such old favorites as *Goldilocks*, *Sleeping Beauty*, *Jack and the Bean Stalk*, or *Hansel and Gretel*, but that is vain. Modern writers cannot satisfactorily imitate these old models nor can they create new tales in the old spirit. Both mould and precious mixture are irrecoverable.

We must not expect, then, that the modern tale will be really so like the old fairy-story that any intelligent person will be deceived. Neither should we judge them for their unlikeness to a type which they can never closely approximate and which the best writers seldom attempt to copy. It would be a mistake to let the strictures of adult judges deprive the child of to-day of the stories of to-day because many of them seem rather trivial and ephemeral. They belong in a class by themselves and have their own style and charm.

The best have many elements of peculiar beauty and delight. Their greater length and complexity is an advantage

when we consider the more mature children. Such stories as *The Little Lame Prince*, *Pinocchio*, *The Adventures of a Brownie*, *The Bluebird*, *The Story of Dr. Dolittle*, call for more sustained interest because of a more elaborate plot worked out with many surprises and with a wealth of charming incidents and whimsical invention on the part of the authors. The characters are followed through greater stretches of time and space, through a greater variety of experiences, and the child audience is thus prepared for the tales of adventure and romance of a later period. In the old folk-tales there is rarely any change in the nature and conduct of the characters; they are usually very, very good or very, very bad at the beginning, and this they continue to the end. The impact of experience, the influence of other natures, have no effect upon them. Modern fairy-tales have as a rule more gradation of light and shade. Since the characters are not tagged so unmistakably as good or bad, readers must judge and discriminate more as regards motive and conduct. The whole nature of the leading character may undergo a change in the progress of the story by reason of the situations and reactions portrayed, as in Lorenzini's *Pinocchio* and Selma Lagerlöf's *The Wonderful Adventures of Nils*.

The moral issues of folk-lore are exceedingly fundamental in character, involving as a rule such questions as courage, truth-telling, justice, filial duty, obedience, and industry. Modern fairy-tales also often center about such issues, but perhaps more frequently the ethical questions are less basic, less deeply rooted in human conduct, and more concerned with such qualities as contentment, kindness, politeness, good temper, unselfishness in small matters, etc. These issues are not to be despised provided the story is developed in such manner as to present the theme in a balanced and artistic way. For the life of to-day is different from that of primitive times, and there are themes of interest and mean-

ing to children which may not have been so significant in a less complex world.

A few exceptionally fine stories for the youngest children have appeared in very small volumes. Among the best are *Little Black Sambo*, by Helen Bannerman; and the beloved *Peter Rabbit* and *Squirrel Nutkin*, by Beatrix Potter. Books of pinafore-pocket size attract in pinafore days, but it takes something more than small dimensions and "cunning" pictures to make a good book for infant minds.

There can be no question as to the popularity of stories of animals dressed up and comporting themselves as human beings. The keen native interest of children in animal life accounts in part for this popularity, and the illustrations are as a rule clever and amusing. Then actions which would be quite commonplace if people were the characters seem unique and exciting when performed by ducks, pigs, foxes, bears, and rabbits. It would seem to the careful observer that better stories are likely to be submerged by the great output of cheap tales of this kind. The newspapers are full of them, and new writers of this type seem to spring up overnight. The children's native liking should not be ignored, but certainly some moderation in selection should be practiced. A few of the Beatrix Potter books, a few of Gelett Burgess's, and single choice stories such as *Perez the Mouse*, adapted by Lady Moreton, and Rae's *Grasshopper Green and the Meadow Mice*, would perhaps furnish enough good examples of this class until the children are ready for that wonderful characterization of animal life, Kenneth Grahame's *The Wind in the Willows*.

A TASTE FOR MODERN VERSE SHOULD BE CULTIVATED

While there is comparatively little verse for average kindergarten and beginning first grade which fits the tastes, interests, and emotional reactions of the period as well as

Mother Goose, we should be on the alert to discover for these years bits of suitable song and poetry from modern writers. The *Peter Patter Book*, by Leroy F. Jackson, contains delightful verse quite in the spirit and style of the old nonsense rhymes. Here and there from the pen of well-known authors have come bits of verse very like folk-rhyme. They are characterized by simple, naïve conceits, pictured vividly, expressed rhythmically, and brought to completion in the smallest possible compass. Laura Richards and Christina Rossetti furnish many examples of this kind, and Stevenson's *Time to Rise, Rain, and Singing* are familiar illustrations. Walter De la Mare's *A Child's Day* presents the simplest everyday experiences in pleasing rhyme, and in his collection called *Peacock Pie* there are several poems as perfect as they are brief which quite young children greatly enjoy. Delightfully childlike and naïve in conception are the little poems bearing the titles *Alas, Alack; The Bandog; and Bread and Cherries*.

A step at a time children should be introduced to less fragmentary, less concrete verse. We should help them by degrees to discover the pleasure to be found in poetry calling for greater imagination, for less obvious association of ideas. It is well at every stage to present some poetry which is likely to appeal by sheer music of meter and language. While there is something very elemental in the appeal of poetry, higher intellectual responses also are called for in all but the simplest nursery rhymes. Increasing mastery of language is demanded, since poetry brings the added difficulties of inversion, elision, figures of speech, and unaccustomed phrasing. Knowledge which comes from experience is required. Poetry does not deal with airy nothings; it presents the familiar world about us in an idealized way, searches out hidden meanings and relations which the average person sees dimly or not at all, and presents these in a

fresh and arresting manner. It follows that the more one has truly experienced, the better he is prepared to enjoy the pictures and interpretations of the poet.

It is true, as has been so often said, that children are natural poets; that they are in the mythopœic stage which causes them to offer naïve and often beautiful explanations of the puzzling phenomena about them. They turn inanimate objects into sentient beings; appearance becomes reality; terms and attributes of the familiar and known are applied to the strange and unfamiliar; there is an easy substitution of one object for another similar in some respect. Flowers are children to be tended; tall weeds are giants to be destroyed; the setting sun is a red balloon; hailstones are little marbles which got spilled; elder blossoms are parasols. But this tendency on the part of children to offer spontaneous and naïve interpretation does not necessarily insure that they can enter into the poetic conceptions of an adult mind regarding the same event or fact. A young child may quite spontaneously call the stars "little holes in the floor of heaven," or may think they are "lanterns which the angels hang out"; but this is no proof that he will be able at that time to shift to Frank Dempster Sherman's beautiful conceptions in his poem *Daisies*, in which he speaks of the stars as "daisies white that dot the meadow of the night"; the moon, a lady fair who

". . . picked them all
And dropped them down,
Into the meadows of the town."

Later the child may be able to play freely with different fanciful ideas regarding life about him, catch charming fancies from others, and perhaps weave these with his own into new patterns, but we need to be careful not to submerge him with mythic, poetic ideas while he is still groping after a few

salient truths regarding the complex world which he has so recently come to inhabit. It is only after we have a dim notion of what stars and moon really are, and have seen daisy fields under just the right aspect, that we can enter with full delight into the charming story which the poet unfolds.

In introducing children to the realm of poetry, great gaps have too often been left. They have been allowed to stumble along with too little guidance, apparently in the belief that some are natural poetry-lovers who will find their own way in good time and that others never will care for poetry anyway.

Judicious selection and intelligent grading are essential if the world of beautiful poetry is to be opened to children. Not only should maturity, experience, and temperament be considered, but we should distinguish also as regards the uses to which the selections are to be put. Some are suitable for teacher and pupils to read together for immediate enjoyment, while other poems might be chosen if one were seeking a series of the most appropriate and important for memorization.

Well-graded material for the first-named purpose may be readily found in numerous excellent collections of poetry for children. Titles of such books are given in the Appendix.

As regards the second purpose, memorization, several extensive studies of published curricula have been made for the purpose of ascertaining which poems are most frequently memorized in our schools.

We may easily attach too much importance to such lists as these. One should not overlook the fact that in making curricula there has been a great deal of borrowing not always of the most intelligent kind. Hence, it is easy for a certain poem or story to appear again and again in courses of study for different cities, and for the "frequency" to be very high.

when as a matter of fact probably very few well-founded, direct, and sincere judgments have been made by those responsible. A group of teachers in a given school, knowing children well and their own pupils in particular, and having an intimate acquaintance with poetry, can make a much more satisfactory selection for that school than will be furnished by any composite list obtainable. We must remember that poetry, especially in its higher forms, has not the same universal appeal as has a fairy-tale such as *Cinderella* or *Puss in Boots*. One cannot have the same assurance that Stevenson's *The Swing*, for example, will be appreciated and liked by almost every child in any first grade in any environment. For these reasons it is wise to take graded lists of poetry compiled for another school or locality as suggestive rather than absolute.

Children should be allowed a great deal of choice as to what they will memorize. There are only a very few selections of such supreme worth that one can safely say every English-speaking child should know them "by heart." Outside of these there are many poems, not differing widely from each other so far as literary quality is concerned, but exhibiting great variety in mood, content, and form. Considering the great individual differences among children themselves, it seems poor psychology to determine too closely poems for mass memorization. The opportunity to choose is one very large element in developing a love of poetry and a sound taste as well. There should be much reading aloud on the part of the teacher as well as by the best readers in the class. In this way the children get a partial acquaintance with a considerable number of poems of various types, and those they choose later for special study and memorization will be much more likely to be selected because of a genuine interest and liking.

QUESTIONS

1. Why is there small excuse for a meager course in literature?
2. Why should one not be satisfied to give young children in school only the *Mother Goose* selections found in primers and first readers?
3. It might be interesting to test an upper-grade class (without previous announcement) to see how many titles of *Mother Goose* they can write in two minutes. Check the results to see if only a very few rhymes are mentioned by nearly all.
4. What are the characteristic points of strength and weakness in modern fanciful tales?
5. Why is it important to give fresh consideration to the selection of poetry for any given course of study rather than accepting largely some ready-made list?
6. Should a considerable latitude of choice be accorded children in the matter of poetry to be memorized? Give reasons for the position you take.

CHAPTER XIV

IF ARITHMETIC IS A TOOL SUBJECT, WHOSE TOOL IS IT?

ARITHMETIC is quite commonly characterized as a tool subject. We are told that its value consists not in any intrinsic meaning, but in its serviceability in accomplishing and understanding the affairs of life. The old argument that the study of arithmetic gives a general mental discipline is in the discard. The human race has slowly evolved and organized a large body of knowledge and skills called arithmetic which it employs to facilitate its labor, its arts, and its social interchange. Is this a tool for children, or does it belong only in the equipment of the adult? When, where, and by whom is it to be actually used?

It is safe to say that, in spite of the modern emphasis upon social aspects of education, there are still thousands of elementary schools in which practically all the arithmetic work for six years consists in an attempt to get control over the skills involved. If the pupils ever test out their ability to apply this knowledge to real affairs, they do it on their own initiative outside of school. This is particularly true of the primary grades. Often in schools where banking, insurance, simple bookkeeping, cooking, and pattern-drafting give some vitality and meaning to arithmetic in the upper grades, the younger children are required to spend practically their entire time on drill in abstractions. Some gain has been made in recent years in upper-grade work through the elimination of processes which are admittedly never used in real life, but which were universally found in the older textbooks and courses of study; for example, least common multiple, greatest common divisor, cube root. Improvement has

been made also by setting a more reasonable limit to the complexity and magnitude of the factors involved in certain operations. Because primary arithmetic did not contain outworn topics similar to those just mentioned, but has always dealt chiefly with the four fundamental operations, it has not profited so much by the progressive movement which has brought upper-grade work more nearly into line with the requirements of everyday life. Yet primary children are farther away by several years from the uses which come with adult participation in trade, manufacture, and accounting, and are therefore less able to project themselves into the future and apply in imagination what they are trying to learn. They are more dependent than the older children upon the present utilization of partly formed skills as opportunity offers in school and home life.

Three or four years (the period usually assigned to primary work) is a long time to keep on sharpening, grinding, or pointing an unused instrument. If it is seldom or never employed for interesting and practical accomplishment and its efficiency tested thereby, how can the worker ever learn to use it successfully? How can he be sure that his control of the tool is satisfactory if he is rarely called upon to handle it in any real undertaking?

There are two kinds of satisfaction in owning a sharp-bladed jack-knife. One comes simply from the sense of ownership; to feel the knife in the pocket, to admire the shining metal, to open and close the blades, to test its keen edge by whittling or hacking any piece of wood which comes to hand. But soon the owner's satisfaction takes a more specific form, such as carving the initials, shaping a boat, cutting and trimming a fishing-rod, and making all manner of boyish contrivances. The knife becomes the boy's most valued and indispensable tool without which he would be handicapped in a hundred situations that are personally

important. And as he uses it, he becomes more and more expert and sure. In one sense the knife is more his own now than when he first acquired it. He seldom sharpens and polishes the blades just because a grindstone is at hand, but is moved to keep the knife in good shape because it is unsatisfactory and annoying to attempt to cut and carve with a dull, nicked, and rusty knife. From childhood to manhood he continues at times to whittle idly at any tempting piece of wood, but this is decidedly a minor satisfaction as compared with the realization of desired ends.

Is it pushing the metaphor too far to attempt to apply the psychology of the jack-knife to the mastery of arithmetic? Of course reasoning by analogy is often fallacious, but if arithmetic is meant to be a serviceable tool, it seems both logical and necessary to inquire to what extent and at what stage we may expect it to function. It is fair also to ask whether adequate mastery can be attained without constant and genuine application of facts and processes.

HAVE FIRST-GRADE CHILDREN ANY USE FOR ARITHMETIC?

The question as to whether arithmetic shall be taught in first grade has been much discussed. Varying answers with resulting policies have almost always been based upon such considerations as maturity of the pupils, the difficulty of the subject, and economy of time. Are first-grade children ready to deal with new symbols and master the facts? Do the results justify the amount of time spent upon the subject in this grade? Occasionally these questions are raised with regard to second grade also. Will the children not be just as far along at the end of the third year if the subject is postponed for a year or two? One very seldom hears the questions, "Do six- and seven-year-old children need some knowledge of number and measure in order to carry on their affairs satisfactorily? Will it help them to understand and

get control over their own world?" Whether these young children truly need some arithmetic in their school life depends upon the character of that life. Where passivity on the part of pupils is the rule, where receptivity is all that is asked, there can be no immediate need for number. Computation is called for only in connection with active affairs. Whenever people are in close active association, living together in social relationships, forming and executing individual and group plans, simple computations are always necessary. This is particularly true when materials are variously employed and where responsibility is shared.

It sounds paradoxical, but it is certainly true that more knowledge of arithmetic is really *needed* during school hours by children in a fairly good kindergarten than in a formal traditional second grade. The former are actively engaged all day in work and play. They are handling a variety of materials and fitting them to a variety of ends, and wherever such activity is going on, concepts of magnitude, quantity, and relation are constantly called for. In the formal second grade which we have in mind the children sit still and do nothing; there is not a scrap of material to do with; they are out of touch completely with the real child-world of work and play. It is obviously impossible for any genuine need for computation to arise here.

It seems strange that just when a strong movement had started toward providing for a more active program and a richer curriculum in primary grades, more play and games, more industrial arts work, more excursions, more pupil responsibility in class organization, there arose a disposition to cut out arithmetic altogether from first-grade work. Through these realities of child-life the school has for the first time a chance to make arithmetic purposeful, effective, and genuinely concrete. Only in the newer type of primary school can the children grasp and use arithmetic as a necessary and valuable tool.

It is to be feared that, where arithmetic has been dropped out of early primary work, it has often been done in order that, through the postponement of one kind of arduous drill, time may be found for more drill in another subject. The mechanics of reading will consume all the time that can be saved elsewhere if those directing the work do not keep a sense of relative values. Suzzallo¹ says:

. . . It is a fairly general opinion that the arithmetic should not be thrown upon the school beginner along with the other heavy burden of learning to read. Learning the mechanics of reading is quite the most important part of the first school year, and the addition of the difficulties of another language, for such number is, would be to overburden and distract the child. Hence a common-sense distribution of burdens and tasks, regardless of questions of child maturity, would delay the formal and systematic study of arithmetic a half or whole school year, little reliance being placed upon previous "incidental" acquisition.

There is abundant evidence that young children are quite as interested in number as in reading. In the very early stages it is perhaps a more universal interest. It seems probable also that in one way or another most children touch upon the quantitative side of life before entering school more than they do upon the reading art, and that they "pick up" more knowledge along the former line. It is a well-known fact among primary teachers that many children entering first grade from the kindergarten and from the home come with a fair start in the rudiments of arithmetic. Failure to utilize and develop this knowledge seems to be justified only where the time saved is devoted to the richer content subjects. Reading in childhood is, of course, more important than arithmetic, because it opens up the rich world of literature and also because it is needed in such

¹ Suzzallo, Henry: *The Teaching of Primary Arithmetic*, chap. iv, p. 37.
Houghton Mifflin Company.

a large part of the other school work beyond second grade. We are simply urging that the first two years in school shall not be given over so completely to forcing this subject to the detriment of almost everything else. If independence and self-help are to be encouraged in manual arts, in games, and in keeping records; if responsibility is called for in care of materials, in other schoolroom housekeeping and in running errands; and if ideas of thrift are to be effectively implanted, then some arithmetic must be well taught fairly early. Furthermore, certain phases of the subject can be more successfully taught in these situations than in any other way.

WHAT IS MEANT BY INCIDENTAL TEACHING OF ARITHMETIC?

The answer which we make to this question determines whether the method so designated shall be considered commendable or reprehensible. Do we mean by incidental teaching that chance bits of knowledge and skill are to be picked up at random out of a mass of experience, to be noted and used to-day and neglected to-morrow? Does the term signify that there is no conscious plan looking toward definite accomplishment, that the whole procedure is about as scattered as is the number experience most children have out of school? No doubt a good deal of practice has justified this conception; but the term is often misapplied to a much more definite and orderly plan. Any procedure which does not follow a fixed and logical order, which turns aside to utilize immediate experience of a quantitative sort even though it may not fall readily into an established system, is by some people designated as *incidental*.

The term is a poor one, and its disrepute has hindered the movement to make arithmetic more useful and interesting to children.

Applied arithmetic more truly describes the kind of number work which should be provided abundantly and with careful, intelligent forethought. Such planning means that all who have to do with making the curriculum, and especially the grade teachers, will make a thorough study in advance of those opportunities for suitable number work most likely to arise through the enriched program of the school. They will provide a greater number of natural situations where counting, learning to read and write numbers, addition combinations, simple measuring, and buying and selling in small values are called for in first and second grade. In third grade a few situations at least will be discovered where building up the multiplication tables and the necessary memorization will be stimulated by some real need. Every unit of work of any scope, whether initiated by children or teacher, will be scrutinized by her to see whether there are not valuable arithmetical features which will be neglected unless she definitely plans to make the most of them. "Making the most of them" ought not to mean the exaggeration out of all proportion of the mathematical elements so that the main purpose is dwarfed or forgotten. One should not in the desire to teach arithmetic spoil an excursion, kill a birthday celebration, overload toy-making to the breaking point, or convert a good game into a stupid, tiresome exercise. Balance and sincerity are called for, and one must keep in view the ideal of helping children to understand and use arithmetic in just the ways that life demands.

WHAT IS THE PRACTICAL IMPORT OF THE PHRASE "BEGIN WITH THE CONCRETE"?

To observe the old tenet, "Begin with the concrete," one must begin with some matter that has meaning and significance to the child so that he really cares about the results

of the calculations. Any other basis is more or less abstract. It has been pointed out by Dr. Dewey and others that things present to the senses, objects which we can see, touch, and handle, are not necessarily concrete. They are only concrete to us when there is an accompanying realization of their meaning and importance. A false conception regarding the concrete has caused us to pin our faith to the use of blocks, pebbles, splints, shoe pegs, and grains of corn for the purpose of making quantities, relations, and processes concrete to young pupils. Two grains of corn and two grains of corn are four grains of corn. The total observation is of no consequence to any one, and therefore abstract. But two pennies in a boy's purse to-day and an imaginary two to be earned to-morrow make the four pennies he needs for that coveted ball, and represents the truly concrete. The three kittens, two white and one black, left at the farm months ago, may be more concrete to the little girl who loved them than are the colored disks arranged in groups of two and one before her eyes.

As rational beings, children are reluctant to use small objects as mere counters. They try to build with the blocks; they want to tell about the pebbles they have picked up and to compare them as to size, color, etc.; they attempt to weave the slats together; they nibble at the corn or beg to plant it. Natively, children seek the true uses and meanings of things, and at this stage "doing sums" with objects is almost as abstract as doing them with figures.

Very suggestive and pointed are the following passages from Dewey and McLellan's *Psychology of Number*:¹

The conscious adjusting of means to end, particularly such adjusting as requires comparison of different means to pick out the fittest, is the source of all quantitative ideas — ideas such as more

¹ Dewey, John, and McLellan, J. A.: *Psychology of Number*, chaps. III, IV. D. Appleton and Co.

and less, nearer and farther, heavier and lighter, etc. Quantity means the valuation of a thing with reference to some end.

Number is in reality a mode of measuring value, and it does not belong to things in themselves, but arises in the economical adaptation of things to some use or purpose. Number is not (psychologically) got from things, it is put into them.

It is almost equally absurd to attempt to teach numerical ideas and processes *without* things and to teach them simply *by* things. It is not the mere perception of things which gives us the idea but the employing of the things in a constructive way.

Merely attaching the names of familiar objects to numbers does not make the concept any clearer or more vivid. I once saw an arithmetic lesson in a first grade, of which the following is an exact description. On the blackboard were some addition examples arranged as shown in the diagram. The children were required to fold their papers

3	4	+	2	3	5	+	2	4	2	4	5
3	2	+	5	4	1	3	3	6	4	2	

so as to secure similar cross-lines and then to copy the figures. They were directed to put pencils in the groove at the back of the desk and the teacher then proceeded as follows. "Hands on heads!" "Three dogs and three dogs are ——." "Write!" "Hands on heads!" "Four pencils and two pencils are ——." "Write!" "Hands on heads!" "Two sleds and five sleds are ——." "Write," etc. At the command, "Hands on heads!" all were expected to place pencils securely in the groove. At the pause after a state-

ment they were expected to find the answer, and at the command, "Write," they were to write it in the space left for the sum. All across the row the teacher continued in her attempt to make the numbers *concrete* by making them denote a number of familiar things. The children's thinking was not affected at all by the mention of these things. They were acting as perfect little automatons. The teacher might, as the next example, have said, "Three *gendarmes* and four *gendarmes* are - -!" "Write!" - and it is safe to say that there would have been no falling-off in the accuracy of the children's responses.

The attempt to teach numerical ideas and processes with scarcely any use of things (or abstract figuring) and the attempt to teach by the use of objects as mere counters are still the two most prevalent methods to-day in primary arithmetic. Here and there, however, schools are beginning to base curriculum and methods partly on the conception presented above -- that "number arises in the economical adaptation of things to some use or purpose." Are there pennies enough, or sheets of paper enough, or wood of sufficient length for such and such a purpose? How many beans did I plant and how many have come up? About how many radishes does our market-man put in a bunch? Can I get a bunch of that size from my garden bed (or box) for my mother? Do I know how to write the numbers properly for the pages of the book I have made? How many more paper doilies must we make for our expected guests from another class? Is that score for our game added correctly? A slight error may give the game to the wrong person. Are any scissors missing? There should be twenty-five pairs. How many minutes by the clock does it take this class to get on their wraps? How many minutes for the quickest child? How many for the slowest? Let us see if we can save enough time for a story. How much ought we to charge for

this lemonade? How can we find out? What will the best lily bulbs cost us? Can we afford to buy any other kind for our Easter bowls?

Where there is constant and genuine contact with realities in arithmetic, half of the difficulties of comprehension disappear. Such terms as *more than*, *less than*, *enough*, *altogether*, *add to*, *remain*, *difference*, *divide*, and many others which often confuse beginners, are readily incorporated in their active vocabulary because their meaning is made clear through practical use. Reasoning, in which many children seem so weak, becomes more accurate because they have so many opportunities to see real problems worked out step by step to a satisfactory conclusion. As an illustration of the disposition of children to go straight to realities in their thinking, I once heard of a small boy who had the following example to solve: "How much will one quart of milk cost if three cost thirty-six cents?" He replied promptly, "Oh, I know *that*, eleven cents a quart at Johnson's."

What should be done is so much more obvious when the situation is a real one; wrong processes and absurd results are so much more easily detected. For this reason, if for no other, most of the problem work in the first three grades should be based upon the actual experience of the pupils or on situations so familiar as to be easily pictured imaginatively. This is not intended as an argument for a prolongation of the actual handling of objects and materials and the postponement of thought processes apart from manipulation. In fact, such manipulation can be dispensed with much earlier and with greater assurance in any given operation if it has been performed often in order to reach interesting and desired ends rather than with counters and for illustrative purposes.

WHAT ARITHMETIC DO CHILDREN REALLY USE?

A notable study was made by G. M. Wilson¹ to find out what arithmetic is actually required by social and business usage on the part of adults. He says:

The procedure is designed to find out what arithmetic mature people use. . . . The plan is to secure from mature people the actual figuring which they do, and then analyze the problems thus secured in order to determine the actual social and business demands upon arithmetic.

While such an investigation has its obvious limitations, it is credited with furnishing valuable evidence as to which subjects and processes should be eliminated or subordinated and which should receive greater emphasis in school.

No such study has ever been attempted as regards children's use of number in everyday life, and it is hardly likely that any very reliable data could be secured. In a small way P. G. Noon² tried to make some such estimate. While his investigation dealt with grades above the primary it is worth while to examine the procedure used and to note the deductions:

This paper is an attempt to answer two questions: (1) What arithmetical knowledge and power should be acquired by a child by the end of Grade VI? And especially, (2) What should be the content of the arithmetic course in Grades IV, V, and VI?

The normal American child is the one considered — one well brought up in the middle class American home, who reached Grade VII at about the age of twelve. . . .

School at best provides an unnatural environment for a child. His out-of-door interests are the best expression of his personality. Accordingly I have gone to the children, who know me, and asked

¹ Wilson, Guy M.: *The Social Usage of Arithmetic*. Bureau of Publications, Teachers College, Columbia University, New York City, 1919.

² Noon, P. G.: "The Child's Use of Number"; in *Journal of Educational Psychology*, vol. x, no. 9, pp. 462-67. (November, 1919.)

them to tell me what uses of numbers they make or notice outside of school. The children were members of the Henry L. Pierce School in a choice residence section of the city of Boston. I went to twelve classes of Grades IV, V, and VI, and to two immature classes of Grade VII; in a most informal and friendly way I got them to give me the information I sought.

Then follows a tabulation of the children's answers. The author credits each item to the lowest grade that reported it. A part of the items mentioned by pupils in Grade IV will be cited here as typical:

Games. Calling and reading numbers as, spots on dominoes, spots on dice. Counting, marbles and tops, keeping score, numbers of bounces of ball. Playing store.

Going to store. Knowledge of quantity (such as pounds) of articles bought, adding to find total cost of articles bought. Counting change.

Other instances of reading (or recognition) of some number. Telephone number, automobile number, number on street car, number on house, telling time, reading thermometer.

Other instances of counting. Money belonging to child, trading stamps, postage stamps in child's collection.

A great many other items similar in character to the above were given by pupils in higher grades. After presenting these in full Mr. Noon says:

Thus do the children reveal the uses of numbers that everyday life causes them to make. Compare this mass of data with the table of contents of any textbook in arithmetic and notice how limited the children's uses are. *Reading of numbers and counting* include nearly every item recorded above. . . .

Below Grade VII, then, there are no needs felt by the child which require the teaching of arithmetic in the school. All he cares for is to count and to read numbers.

What, then, shall we teach?

In the first place, we may at once discard *applied* arithmetic in the grades below the Junior High School. Our textbooks may drop the "Practical Problems," because they are as foreign as Chinese *to a child's way of thinking.

Continuing the discussion, the writer recommends mechanical drill in pure number as opposed to applied number.

Other small informal surveys of the uses which children have for arithmetic outside of school have been made, but the exact results are not available. The impression left regarding one report from an industrial community is that the children said they did not handle much money; that when they went on shopping errands they either charged the items to the parents' account or they were given just the right amount of money for the purchase. This would not be the case in all communities, but it is probably true that children in general, left to themselves, do not make extensive use of mathematics.

Granting that the child's use of number is apt to be rather sporadic and random, does it follow that the school should neglect or abandon practical problems in favor of "pure number"? The opposing view to be offered here is based upon two features of the modern school: First, it furnishes a highly selected environment which provides opportunities, responsibilities, and duties of a very genuine social kind. The children are real citizens in this school world, carrying on many important affairs of a quantitative kind. Second, through experience and training thus secured in school, children are enabled and encouraged to participate intelligently in home and community affairs in which heretofore they have been mere onlookers or dependents.

DO PRESENT-DAY CURRICULA INDICATE THE FUNCTIONAL POINT OF VIEW?

An examination of a large number of curricula, published since 1918, shows that it is still not uncommon to offer as a guide to teachers of arithmetic nothing but a tabulated arrangement of pure abstractions. Such courses of study usually have a brief introduction which recognizes in a very

perfunctory way the principle of application to problems of everyday life, but there is nothing to stimulate, illustrate, or direct this kind of work. The following examples are taken from courses of study published since 1919 and reproduce all that is indicated for the particular grades:

ARITHMETIC. SECOND GRADE.

Reading numbers. To 1000.

Counting. Review work of First Grade. Count by 2's to 100; 3's to 36; 4's to 40, beginning with 0.

Addition. 5 6 7 8 9

$$\begin{array}{r} 5 & 6 & 7 & 8 & 9 \\ \underline{6} & \underline{6} & \underline{6} & \underline{6} & \underline{6} \end{array}$$

Add numbers of two orders. Limit to two addends with no "carrying."

Subtraction. Use addition process. Numbers of two orders. No "carrying."

In like manner Multiplication, Measurement, and Fractions are briefly outlined.

Another important city offered the following matter in the Course of Study for 1921 as the only guide for teachers in I A:

Reading numbers. To 100.

Counting. With objects to 20; without objects, by 1's to 50; by 5's to 50; by 2's to 20; by 10's to 100.

Addition. 1 2 3 4 5 6 7 8 9 10
 $\begin{array}{r} 2 \\ \underline{2} \end{array}$ $\begin{array}{r} 2 \\ \underline{2} \end{array}$

$$\begin{array}{r} 1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9 & 10 \\ \underline{3} & \underline{3} \end{array}$$

Subtraction. By the addition process. Minuends to 12.

Measurement. Cent, five cent piece, dime, inch, foot, pint, quart.

Written work. Write numbers to 100. Add numbers of two orders, limiting to two addends. No "carrying." Signs +

In contrast to such outlines it is gratifying to notice the goodly number of cities and States which have recently published courses of study in arithmetic which not only recommend the immediate and useful application of number to children's interests and activities, but which also contain vital subject-matter so organized that teachers can readily appropriate it. Among the more recent contributions of this kind are the following courses of study:

Duluth Public Schools, Duluth, Minnesota, 1919.

Richmond Public Schools, Richmond, Virginia, 1921.

Passaic Public Schools, Passaic, New Jersey, 1923.

State Course of Study for City Elementary Schools of Montana, Helena, Montana, 1920.

Sections from some of these will be briefly described. The Richmond course is presented in outline in two parallel columns, one called "Suggested Activities," the other "Subject-Matter." The first offers many good suggestions for number experience of a practical kind in school and at home, and the other gives briefly the corresponding facts and skills appropriate to the grade. There is no chance for teachers to lose sight of the fact that these two elements must be constantly employed to reinforce and clarify each other.

In the Duluth course, a "General Project" is given for each grade beginning with II B. These projects are outlined rather fully and the following statement is made introductory to each:

General Project. This is a suggested project which will involve much of the subject-matter of the grade. Lest it should not provide sufficient drill to fix the processes, minor projects are given as

details under each topic of subject-matter. The latter are unrelated, but might be an outgrowth of a larger project similar to the one here given.

These "general projects" by grades are: Grade II B—Playing Store. II A—Playing Cafeteria. III B—Playing Post-Office. III A—Planning and making a class garden. [This is a real garden.] IV B—Buying Coal. [Partly real, partly supposititious, but based on actual local conditions.] IV A - To save school supplies. [A very genuine and practical study containing implications as to important habits and attitudes regarding property.]

The following is a portion of the outline for Grade II B, taken from the Passaic Course of Study:

The number work of the first grade is informal, and no effort has been made to organize it definitely, but in the second grade the teacher must consciously provide for situations which necessitate the use of numerical computation. These situations must have content value, and whatever is presented must appeal to the child as something that is going to aid his present interests in a very definite way.

There is a brief statement of "Technical points to be taught always through life situations," followed by many suggestions for activities involving number. Among these are:

1. Arithmetic games. Score kept for sides.
 - a. Partners for a march -- Child with card bearing a combination is joined by child with a card bearing the answer.
 - b. Bean-bag tossed through hoop with bell.
 - c. Ring-toss.
 - d. Ten-pins --- stiff paper rolls.
2. Thermometer — Use real thermometer. Place bulb in cold water and in sun to see change. Note temperatures inside schoolroom and outside. Meaning of "below zero" taught in winter.

3. Weather chart — Number of sunny days noted; rainy days, etc.
 4. Calendar for the year examined and varying number of days in the months noted; shortest month; long months; etc. Number of days between the present and Thanksgiving Christmas, etc.
 5. Change for one dollar. Use all ways.
 6. Class attendance — record kept.
 7. Reading and writing home addresses and telephone numbers.
 8. Playing store. Store to be kept open once a week on a certain day.
 - a. It has been estimated that children make 40% of the purchases of household supplies. If even half of this is true, we have a wonderful opportunity in playing store to closely relate the work in arithmetic to the activities of life outside the school.
 - (1) He needs to know whether or not he has money enough to pay for his purchases.
 - (2) If not, how much more will he need?
 - (3) Has he received the right amount of change?
 - (4) How many articles can he buy for his money?
- Note: These points will not all be present in any one experience; (2) and (4) relate more particularly to the child's own personal purchases of marbles, oranges, or what not. The outline for 2 B makes the foregoing possible.

POSSIBLE INFLUENCE OF STANDARDIZED TESTS IN PRIMARY ARITHMETIC

There is a widespread uneasiness among thoughtful and well-informed teachers lest the present prominence of standardized tests control completely the selection of subject-matter and method. Comparison of such abstract courses of study as the first two cited above with standard tests in arithmetic shows a strong correspondence. Part of the *Woody Addition Scale*¹ is here presented for convenience

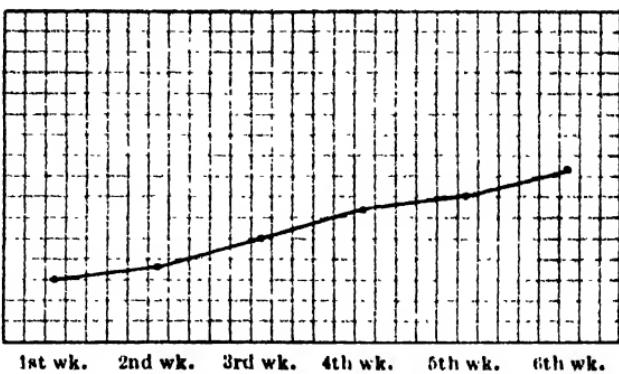
¹ Woody, Clifford: *Addition Scale*. Series A. Teachers College, Columbia University, New York City.

of comparison. The part given below approximates what the average third-grade child should do correctly:

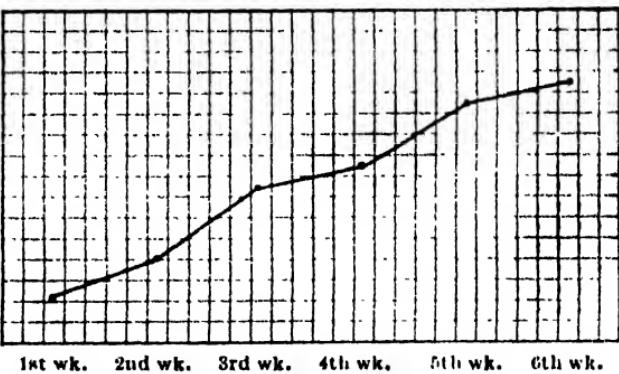
$$\begin{array}{r} (10) \\ 2 \ 1 \\ 3 \ 3 \\ \underline{3 \ 5} \end{array}
 \begin{array}{r} (11) \\ 3 \ 2 \\ 5 \ 9 \\ \underline{1 \ 7} \end{array}
 \begin{array}{r} (12) \\ 4 \ 3 \\ 1 \\ \underline{2 \ 9} \end{array}
 \begin{array}{r} (13) \\ 2 \ 3 \\ 2 \ 5 \\ \underline{1 \ 6} \end{array}
 \begin{array}{r} (14) \\ 25 + 42 = \\ \hline 67 \end{array}
 \begin{array}{r} (15) \\ 1 \ 0 \ 0 \\ 3 \ 3 \\ 4 \ 5 \\ 2 \ 0 \ 1 \\ 4 \ 6 \end{array}$$

Faithful and reasonably intelligent drill in sufficient amount along the meager lines laid down in the two courses illustrated on page 290, will enable pupils to attain a proper standing for the grade as measured by tests of this kind. To do this there need be no mention of application to practical affairs, much less any actual use of knowledge and skill. Inevitably the tendency of the school is to attach paramount importance to those achievements by which standing is determined, with the result that abstract operations will get the lion's share of attention unless other influences preserve a balance.

Care should be taken to inform children as to the real value of the tests to them. Pupils who are mature enough to pass these tests are mature enough to comprehend that the results merely indicate how well they can perform certain operations that have already been used in a multitude of ways. If arithmetic has been well taught, second-grade pupils will understand the meaning of "measure," and they can grasp the fundamental idea of an arithmetic scale in re-

NORM.**GRADE VIII****GRADE VII****GRADE VI****GRADE V****GRADE IV****GRADE III****GRADE II****GRADE I****FIG. 32. GRAPH SHOWING PROGRESS OF A GROUP IN ARITHMETIC**

Record of the progress made by a group of twelve gifted fourth-grade children in ability to add, subtract, multiply, and divide

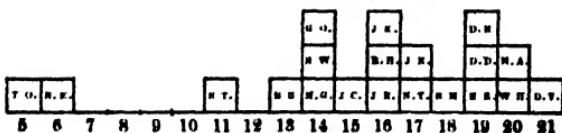
NORM.**GRADE VIII****GRADE VII****GRADE VI****GRADE V****GRADE IV****GRADE III****GRADE II****GRADE I****FIG. 33. GRAPH SHOWING RAPID PROGRESS OF ONE CHILD IN ARITHMETIC**

Record of the progress made by one gifted fourth-grade child who was told that he measured second grade in ability to add, subtract, multiply, and divide, and that by other measures, we knew he could attain eighth-grade ability.

lation to their own attainments. Teachers very generally now are employing these tests to furnish in part the guidance and stimulus which children need in formal work. To this end they are early shown the significance of simple graphs which depict individual standing and group attainment.

THE PRIMARY SCHOOL

Addition, November 28, 1928



Addition, January 28, 1929

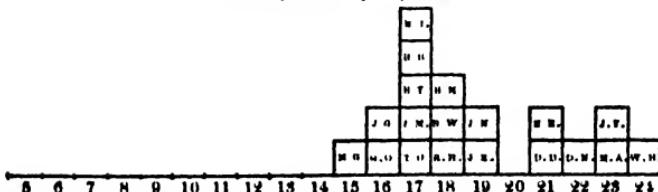


FIG. 34. GRAPHS SHOWING ACHIEVEMENT OF THIRD-GRADE PUPILS IN ADDITION

These graphs show the number of addition examples on the Woody Scale done correctly by third-grade pupils in November and again in January. Large graphs like these hang on the wall showing each child where he stands and the steps in improvement made in two months. Children are interested in evidence of individual gain and also in class achievement.

They can see where they need to put forth greater effort and where they can safely take time from arithmetic to apply to something else. Intelligent use of measurement will help teacher and pupils to coöperate in attaining a good balance in their work.

Figures 32, 33, and 34 show graphs of this kind.

VALUE OF THE PRACTICAL TEST

Granting the high importance of the steady, assured acquisition of fundamental skills and the corresponding measurement of such learning, it may still be questioned whether the center of gravity does not at present lie too much in that direction. In the ordinary daily work of the classroom should not more emphasis be placed upon what children can do that is personally and socially valuable in situations demanding a knowledge of number, and less upon dissociated

facts and skills? Here are a few illustrations of objectives in the realm of social efficiency which are being used at different stages for the purpose of both teaching and testing. In each case the final test is, "Can you show that you are able to perform this useful or pleasurable act in a satisfactory way?"

How well can you add? Are you a reliable score-keeper in games of bean-bag, ring-toss, and ten-pins? Can you add up the milk order which goes to the lunchroom? How do you tell the number of dots that turn up on the dice in playing parchesi? Do you know 5 and 5 dots, 4 and 4, 6 and 3, or do you have to count them each time? When you move a "man" around the parchesi board, do you count each space or are you able to move by fives and sevens also?

Can you count aloud to 50 in this blind-man's game? Open your eyes. We have hidden seven balls, see how quickly you can find them. You have found three, how many more are there? etc.

Are you able to carry a little purse of your own and pay your own car-fare? If your mother's hands are full when you enter a car, can you pay correctly for two or three people?

Can you show us that you can make change and count money well enough to be cashier or assistant cashier at the sale? Ought we to elect you if you cannot do this well? Can you get ready in two weeks to be ticket-seller at the puppet show?

Can you tell time? How well can you tell time? If your mother were busy in a room where there is no timepiece and should ask you to look at a clock and tell her the hour, could you be depended upon to do it correctly?

Can you read the thermometer?

Do you know how to find dates on a calendar?

Would you like to learn how to keep your own attendance

records and to compare them with those of the other third grade?

Would you like to mark all the birthdays of the children in this class? Let us see how many are in October, November, etc. Perhaps we can plan a surprise for the "birthday people" each month.

If you are reading a book, can you tell how many pages are still to be read without counting them?

Can you run on little errands for your mother to buy bread or apples, thread or pins, pay for the things out of a quarter or half-dollar and know that you have the right change? Let us see if you can do this.

Can you help your mother to measure the flour, milk, sugar, etc., that she needs for making a cake? Can you receive the groceries when they are delivered and help your mother check them off, or weigh them to see if the measure is correct?

Would you be able to check up the weekly laundry bills? the weekly milk bills?

Can you make neat, good-looking figures? Can you write numbers in hundreds? See if you can help me by writing these "examples" on the board for the next class, as I read the numbers to you.

Can you write correctly telephone numbers given to you over the telephone? Can you read these in the "telephone way" and in the way numbers are usually read?

How nearly can you get these automobile numbers as I flash them? Can you write this one from memory?

How many have a small allowance of spending money? How many are earning a little money? Do you have pennies and nickels given to you? Shall we make some little account books and see where our money comes from and where it goes?

This beautiful picture costs —— cents.

This lovely picture book costs —— cents.

This little doll (or top, ball, kite, hoop, box of paints, tool, etc.) costs —— cents.

How many lollipops (or packages of chewing gum, or bottles of "pop," etc.) would cost almost exactly the same as the doll, the top, the paints, etc.? Ought all of your money to be spent for lollipops and chewing gum?

ARITHMETIC AS AN AID IN INTERPRETING THE LARGER WORLD

Next in importance to learning in order to do worth-while things in an efficient way comes learning in order to understand and appreciate what other people are doing — especially the workers who are most directly serving us. Suzzallo¹ says, "Arithmetic is not a subject in which only the skills of calculation are cultivated; it is one that contributes social insight, just as history and geography do." The quantitative side of food and clothing, of building and transportation, of agencies for safety, protection, and comfort, such as the fire department, police service, street-cleaning, park system, water supply, etc., can be made very interesting to children. In fact, these matters of individual and public interest cannot be made clear and vivid without some consideration of the mathematical side. The needs of other children the world over, the relatively favorable position of American children to-day and the consequent obligation which they owe, can be understood only through an intelligent dealing with quantities and relations. While many of these subjects will be introduced in the first three grades, there is always a danger that the quantitative aspects will be too complex and difficult, since world questions, industry, and public utilities necessarily involve very large quantities.

¹ Suzzallo, Henry: *The Teaching of Primary Arithmetic*. Houghton Mifflin Company.

For this reason the use of arithmetic for purposes of interpretation and appreciation is more appropriate for grades above the third. At the same time, if used with judgment and discretion the simpler phases of these topics can be handled by third-grade children with profit — profit both in mathematical training and in deepened understanding of socially significant questions.

Arithmetic should also be used to interpret questions of temporary and local interest. The following outline shows what was done by the third-grade classes in one school in connection with a question of this sort:

Citizens and school officers were urging that the street in front of the school be closed to traffic from ten to twelve in the morning to give play space to a succession of primary classes. The children were told about the movement and third-grade pupils undertook to ascertain about how many vehicles would be obliged to take another route in one day in order to give the school children a playground.

In each of the four third grades the children appointed six committees of two, to watch in twenty-minute "shifts," and count the vehicles which passed. This was done for four successive days, each third-grade class being responsible for one day. The count was made four times, partly in order to give exercise to more children and partly because the record for one day might not be typical.

III A ¹	III A ²	III B ¹	III B ²
<i>First Day</i>	<i>Second Day</i>	<i>Third Day</i>	<i>Fourth Day</i>
20	11	10	9
14	9	19	13
21	14	23	12
13	16	15	17
22	8	18	10
15	20	11	21
<hr/> 105	<hr/> 78	<hr/> 96	<hr/> 82

The children planned record sheets, and as each pair returned to the room they entered their count. Thus the column for III A¹ means that six committees from that class, each serving for twenty minutes, recorded the six items denoting vehicles counted by them.

How many vehicles passed between 10 A.M. and 12 M. the first day? the second day? etc.

How many passed during these hours in four days?

$$\begin{array}{r} 105 \\ 78 \\ 96 \\ 82 \\ \hline 361 \end{array}$$

What is the average number during these hours for one day?

$$\begin{array}{r} 90 \\ 4 \overline{) 361 } \end{array}$$

Is this heavy traffic? What can you find out about the number of vehicles per hour on some other street?

How many children could have a play-time each day in this space?

Pupils enrolled in five first grades are ascertained to be 29, 35, 32, 34, 36; in four second grades, 32, 35, 36, 36; in four third grades, 34, 35, 36, 36; in three fourth grades, 40, 36, 38.

Pupils decide to add these by grades and then combine the results. They find there are 166 enrolled in first grade, 139 in second, 141 in third, 114 in fourth, or a total of 560 children in the 16 classes which are to use the playground in the morning.

Might the drivers of these 90 vehicles be asked to go some other way in order that 560 children may play in safety? Perhaps the members of the Council who are to decide this

question would like to have our figures. Can we do correct work in neat, clear form and send it to them with a letter?

Many teachers who claim that there are few opportunities for really motivating the arithmetic work and for genuine application of facts and processes suited to a given grade constantly let occasions like the above slip by without ever seeing the possibilities. It is not a matter of ingenuity and inventiveness on the part of teachers, but rather of alertness in recognizing educative values inherent in incidents of school and community life. If half of the time and effort that go into the invention and use of foolish devices for drill in arithmetic were spent in discovering and developing fruitful number experience, there would not be so much need for isolated drill. Furthermore, when children are trying to find out interesting things and endeavoring to accomplish ends that seem to them worth while, they are perfectly willing to engage in necessary drill in a frank, straightforward, and businesslike way.

ARTIFICIAL DEVICES ARE POOR SUBSTITUTES FOR PURPOSEFUL DRILL

The sugar-coated device, as distinguished from a real game or lively, direct, and sensible drill, is always an acknowledgment of weakness in curriculum and method. Perhaps the reader does not know just what is meant by foolish devices. Here are a few examples.

A crude drawing of a house is on the blackboard with lurid flames and a cloud of smoke bursting from the window, a child at the window, and a ladder reaching from ground to window ledge. Figures are written on the rungs of the ladder — perhaps 2, 5, 4, 3, 6. The teacher says: "Children, this house is on fire. Who wants to be a fireman? Who can run up this ladder in one minute and save the child who is

about to be burned? All right, John, you may be the fireman. Hurry up, hurry up, the fire is getting worse." And John is supposed to add the numbers with greater interest, speed, and accuracy because of this exciting situation. If he makes a mistake the child in the picture is lost or another fireman must rush to the rescue.

Toy balloons drawn on blackboard, colored, and arranged as if blowing away. Statements from the multiplication tables are printed in them, such as 2×6 , 3×4 , 2×8 , 3×5 , 4×4 , 2×9 , etc. The teacher says: "See! children, these pretty balloons are blowing away. Who can catch the most? Who can catch them all in one minute?" "Catching" them consists in pointing to a statement and giving the answer.

An oval is outlined on the board and crude fish of different sizes are drawn within. This is supposed to be a fishpond. The fish are considerably named for the convenience of the fishermen. They are called $7 - 4$, $8 - 3$, $6 - 3$, $7 - 2$, etc. The pointer is a fishing-rod. Of course the small Izaak Waltons must show their prowess by hooking the remainders as dexterously as possible.

Here is a railroad train about to dash into a pile of débris on the tracks. "Choo-choo; it is almost there! See the faces of passengers at the windows! Who will save them?" The pile of débris consists of carefully labeled items placed there by some unfeeling but systematic person, and these the young heroes must with brain and brawn remove. The items (as you may by now have guessed) consist of mixed combinations in addition, subtraction, and multiplication. Lively, now! The train speeds on; one bad move and it will be dashed to pieces.

And so the pretense goes on with the necessity of ever increasing the excitation of the children's jaded minds. They are not fooled long. Even a red-chalk fire and an imminent wreck lose their thrill when experienced too often. The fish refuse to rise to the old bait. The teacher, therefore, must produce some new attraction, and she turns to grab bags, rescue from shipwreck by breeches-buoy, coasting, gifts on the Christmas tree, etc., all these appearing, of course, in the guise of "examples" to be solved.

Such artificial drill devices are an insult to the intelligence of bright children, and they probably confuse both bright and dull minds. To see the numerical concept "three and three more," appearing now as a fish, now as a balloon, and again as fleeing rabbit, flying bird, and sinking ship, serves to dim rather than sharpen the impression. The inferiority of such presentation to the experience in number concepts which children get from calculations performed in the ordinary way for a real and interesting purpose must be obvious to any one. Such drill is also very inferior to properly systematized and graded practice exercises worked out by experts who understand the laws of number as well as the laws of learning. Consideration should now be given to self-drill and teacher-directed exercises of this kind.

HAVE CHILDREN AN INTRINSIC INTEREST IN ARITHMETICAL LEARNING?

Even among the most ardent believers in the paramount importance of purposeful activity and sensible application in the teaching of arithmetic, few if any deny that a great many children manifest a keen interest in mathematical relations and exercises simply as puzzles or as "stunts" to test their mettle. They take great pleasure in showing that they can master a certain process or surpass some previous record in a given operation. They count the daisies by the road,

not because it matters how many daisies there are, but for the sheer satisfaction of rhythmical enumeration. They read numbers aloud wherever they see them and they try to make the figures. They often ask, "How many?" when the answer is evidently of no practical significance. They like to try to do what they see older boys and girls doing. With manifest satisfaction they announce, "To-morrow we are going to learn how to do long division!" And there seems to be something of the anticipatory thrill that might accompany the statement, "To-morrow I am going to scale Mount Everest." Most children, if well taught, get genuine satisfaction out of the successful accomplishment of a certain definite amount of work of a definite kind suited to their abilities, particularly if their work is recognized and commended. One little girl, who "just hated" in the beginning to *do* every new operation in arithmetic, would in a short time beg the teacher to give her more examples of the same kind. She had learned the trick and enjoyed making the examples come out right.

There is a certain wonder attached to the first demonstration of "proof," in subtraction, for example, when one learns that adding the subtrahend and remainder will give the minuend. For a time there is pleasure in testing the principle to see if it works. To some children cancellation is almost as much fun as tit-tat-toe. One little girl who was very clever in arithmetic delighted in long examples involving cancellation, but she never thought of scrutinizing her answers to see whether they were reasonable or not. This same child greatly enjoyed working long examples in finding the greatest common divisor and least common multiple — those now discarded and derided operations. Intellectual play of this kind carries with it no criterion of relative worth. Children like to do the things which they know how to do sufficiently well to insure a fair degree of success and praise.

They like especially those operations which reveal a little of the exactitude of mathematics, though they could not state the cause of liking. I refer to such types as those mentioned above — proofs, cancellation, long division that comes out even, etc. Without careful guidance children are apt to go on practicing something already fairly well mastered rather than operations in which they are inexpert. With wise direction, however, the child's native curiosity, the puzzle interest, pleasure in intellectual activity, and satisfaction which comes from success will furnish an important part of the stimulus needed to carry him through the many repetitions of a process which are required for complete habituation. Thorndike¹ has discussed very fully and fairly the respective uses and merits of the two aspects of arithmetic — that in which purpose centers in some affairs of life and that which he calls "intrinsic interest in arithmetical learning." He gives the following summary of general principles which he believes to govern the question:

In many cases arithmetical facts and principles can be well taught in connection with some problem or project which is not arithmetical, but which has special potency to arouse an intellectual activity in the pupil which by some ingenuity can be directed to arithmetical learning. Playing store is the most fundamental case. Planning for a party, seeing who wins a game of bean-bag, understanding the calendar for a month, selecting Christmas presents, planning a picnic, arranging a garden, the clock, the watch with second hand, and drawing very simple maps are situations suggesting problems which may bring a living purpose into arithmetical learning in Grade 2. These are all available under ordinary conditions of class instruction. . . .

In general what should be meant when one says that it is desirable to have pupils in the problem-attitude when they are studying arithmetic is substantially as follows:

First. Information that comes as an answer to questions is

¹ Thorndike, Edward L.: *The Psychology of Arithmetic*, pp. 274-77.
The Macmillan Company, 1922.

better attended to, understood, and remembered than information that just comes.

Second. Similarly, movements that come as a step toward achieving an end that the pupil has in view are better connected with their appropriate situations, and such connections are longer retained, than is the case with movements that just happen.

Third. The more the pupil is set toward getting the question answered or getting the end achieved, the greater is the satisfyingness attached to the bonds of knowledge or skill which mean progress thereto.

Fourth. It is bad policy to rely exclusively on the purely intellectualistic problems of "How can I do this?" "How can I get the right answer?" "What is the reason for this?" "Is there a better way to do that?" and the like. It is bad policy to supplement these intellectualistic problems by only the remote problems of "How can I be fitted to earn a higher wage?" "How can I make sure of graduating?" "How can I please my parents?" and the like. The purely intellectualistic problems have too weak an appeal for many pupils; the remote problems are weak so long as they are remote and, what is worse, may be deprived of the strength that they would have in due time if we attempt to use them too soon. It is the extreme of bad policy to neglect those personal and practical problems furnished by life outside the class in arithmetic the solution of which can really be furthered by arithmetic then and there. It is good policy to spend time in establishing certain mental sets — stimulating, or even creating, certain needs — setting up problems themselves — when the time so spent brings a sufficient improvement in the quality and quantity of the pupils' interest in arithmetical learning.

Fifth. It would be still worse policy to rely exclusively on problems arising outside arithmetic. To learn arithmetic is itself a series of problems of intrinsic interest and worth to healthy-minded children. The need for ability to multiply with United States money or to add fractions or to compute per cents may be as truly vital and engaging as the need for skill to make a party dress or for money to buy it or for time to play baseball. The intellectualistic needs and problems should be considered along with all others, and given whatever weight their educational value deserves.

Probably no one believes that there can be found during the short school hours enough intrinsically valuable situa-

tions to provide the amount and kind of practice which children must have to insure adequate command of the four fundamental operations, for example. Even if such an achievement were possible, it would be a wasteful process for all but the most precocious children. But the actual use of arithmetic should play a large part at every stage. It should usually initiate processes, should help to direct and sustain effort in drill, and should furnish one very important measure of success. Schools in which there is an excessive amount of work in arithmetic where the objectives lie outside the subject itself, are rare, if they exist at all. Few if any are centering upon immediate childish interests and occupations to the detriment of "pure" mathematics, while those in which entire reliance is put upon formal abstractions are countless. There is no apparent need in present-day practice to call a halt on applied arithmetic, or the attempt to have children use it as a practical tool.

SHOULD WE EXPECT TO INculcate CERTAIN DESIRABLE ATTITUDES AND IDEALS THROUGH THE STUDY OF ARITHMETIC?

This phase of the subject may not be so prominent in primary grades as in more advanced work, but it should not be neglected. The conception of good workmanship can be strengthened by emphasizing the importance of reliability. This is called for particularly where the results of the calculations are of practical consequence. In applied arithmetic a result is usually right or it is not right; that is, it forms a reliable basis for action or it misleads. Sometimes the careless work of one child creates difficulty for a group, and on such occasions public opinion is outspoken on the side of careful, painstaking effort.

Fair play can be encouraged in all sorts of games, but in those involving number it is especially important. Honest

mistakes are made which must be rectified and deliberate juggling is very easy. A desire to render an accurate and honest reckoning is the standard to be worked for.

Thrift, conservation, and real generosity have no permanent basis without a knowledge of relative values. A child may put all his pennies into his bank for the fun of dropping them in or from habit, rather than from any real idea of saving. Thrift means subordination of the lesser or temporary good to the greater or more permanent. Conservation rests upon a similar basis. Children may be taught to conserve supplies of paper and pencils or to be careful of their clothes simply by constant pressure of one kind or another, but conservation as a right principle of social behavior comes only with a knowledge of values and a sense of responsibility. Respect for the property of others can often be greatly increased by translating the values over into terms more easily understood. For example, the cost of the broken pane of glass measured by the boy's own purse; or the impressive total required to refinish defaced desk tops.

A child may readily give all his pennies away, either because he got them without effort or because he has no realization of their worth to him, rather than from any really generous impulse. The truest generosity where money is concerned is not found in the outpouring of ignorance or thoughtlessness, but in unselfish giving after counting the cost. Some knowledge and understanding of mathematical relations lies back of all these ethical and social attitudes and habits. In his book on *The Use of Money*, E. A. Kirkpatrick discusses in a very helpful way the financial training of children.

Wherever money is to be raised through the sale of handicraft or by giving an entertainment, wherever children are to have a part in the disbursement of funds either for the benefit of the school or for philanthropy, we should see to it

that right ideas as well as correct calculations are encouraged. What would be a fair price to ask for these things? Shall we get just as much as possible for them? Are our cookies as good, as large, as those at a certain shop of high standard? Is that correct and honest weight? Is this "show" really worth five cents? No matter on how small a scale affairs of this sort are conducted, they represent real business transactions, and sound rudimentary business principles should be taught.

QUESTIONS

1. In the school life of the children whom you know best, what genuine uses are there for number? In what ways might occasions for applied number be increased?
2. Give illustrations of how number may be used to make some experience clearer or more interesting and significant.
3. If required to follow a course of study similar to those on page 290, what could you do to give your pupils a fuller and better training than these bare outlines call for?
4. What is the difference between a device for drill and a real game with arithmetical features?
5. Considering arithmetical values only, how would you decide whether time might profitably be given to playing dominoes or parchesi in school?
6. What is Thorndike's point of view regarding the two kinds of problems, the "intellectualistic" and the "personal and practical"?
7. What serious difficulties often arise when arithmetic is dealt with as an integral part of some project?
8. What attitudes and ideals connected with arithmetic have you definitely tried to inculcate?

APPENDIX

I. SUGGESTIONS FOR A SMALL LIBRARY FOR PRIMARY TEACHERS AND SUPERVISORS

PEOPLE engaged in primary education are aware that until quite recently very few books have appeared dealing directly with the larger problems in this field. Numerous textbooks are available which present in some detail the methods and materials involved in teaching specific subjects, but the individual reader as well as classes in training schools have found it necessary to consult a large number of scattered references in order to get a satisfactory view of the modern primary school.

The author has tried to bring together in this bibliography the best references which treat strictly of primary work as well as a few of those of a more general nature which are indispensable to workers in this field. Inspection will show that about four fifths of the books and bulletins listed have been published since 1918. This indicates not only that the compiler has endeavored to prepare a fresh and timely bibliography, but that there has been a great development of late in literature bearing directly on early education.

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Bonser, F. G. *The Elementary School Curriculum*. The Macmillan Company, 1920.

Bonser, F. G., and Mossman, L. C. *Industrial Arts for Elementary Schools*. The Macmillan Company, 1923.

Bureau of Education:

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The Housing and Equipment of Kindergartens. Bulletin, 1921, no. 13.

A Kindergarten-First Grade Curriculum. Bulletin, 1922, no. 15. Government Printing Office, Washington, D.C.

Bureau of Educational Experiments:

Playthings. Bulletin I.

A Catalogue of Play Equipment. Bulletin VIII.

Education Through Experience. Bulletin X.

Bureau of Educational Experiments, 144 West 13th Street,
New York City.

- Burke, Agnes, and others. *A Conduct Curriculum for the Kindergarten and First Grade.* Charles Scribner's Sons, 1923.
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Libraries. The Boston Book Company, Boston, 1915. See especially Part II on "Selection of Books and Children's Literature."

Francis W. Parker School Year Books:

The Social Motive in School Work. Vol. I, 1912.

The Morning Exercise as a Socializing Influence. Vol. II, 1913.

The Course in History. Vol. VII,

Francis W. Parker School, Chicago.

Freeman, F. N. *The Psychology of the Common Branches.* Houghton Mifflin Company, 1916.

Germane, C. E., and Germane, E. G. *Silent Reading. A Handbook for Teachers.* Row, Peterson & Co., 1922.

Gesell, A. L. *The Pre-School Child.* Houghton Mifflin Company, 1923.

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Golds, S. A. *A Guide to the Teaching of Manuscript Writing.* Blackie & Son, London, 1919.

Horace Mann Studies in Elementary Education. Teachers College, Columbia University. Reprint, 1922.

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Johnson, G. E. *Education by Plays and Games.* Ginn & Co., 1907.

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Kirkpatrick, E. A. *Use of Money.* Bobbs-Merrill Company, 1915.

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Moore, Annie E. *The Use of Children's Initiative in Beginning Reading.* Teachers College Bulletin. Twelfth Series No. 8. Teachers College, Columbia University.

National Society for the Study of Education:

Eighteenth Yearbook. Part II. 1919. Gives well-founded, expert opinion in condensed form regarding teaching of reading, writing, and spelling.

Nineteenth Yearbook. Part I. 1920.

Twentieth Yearbook. Part I. 1921.

These two contain brief descriptive accounts of problem-project work under the title "New Materials of Instruction."

Public School Publishing Company, Bloomington, Illinois. Norsworthy, N., and Whitley, M. T. *The Psychology of Childhood.* The Macmillan Company, 1918.

Oliver, M. G. *First Steps in the Enjoyment of Pictures.* Henry Holt & Co., 1920.

Palmer, L. A. *Play Life in the First Eight Years.* Ginn & Co., 1916.

Parker, S. C. *Types of Teaching and Learning.* Ginn & Co., 1923.

Pennell, M. E., and Cusack, A. M. *How to Teach Reading.* Houghton Mifflin Company, 1923.

Pratt, Caroline, and Wright, Lulu E. *Experimental Practice in the City and Country School.* E. P. Dutton & Co., 1924.

Reynolds, H. M. *A Course of Study in Terms of Children's Activities.* For Kindergarten and Primary Grades. Board of Education, Seattle, Washington, 1922.

Robbins, C. L. *The Socialized Recitation.* Allyn & Bacon, 1920.

St. Cloud Public Schools. *Reading in the St. Cloud Public Schools.* Prepared by Ruth E. Hilpert. Board of Education, St. Cloud, Minnesota, 1924.

Sargent, Walter. *Fine and Industrial Arts in Elementary Schools.* Ginn & Co., 1912.

Sies, A. C. *Spontaneous and Supervised Play in Childhood.* The Macmillan Company, 1922.

Stone, C. R. *Silent and Oral Reading.* Houghton Mifflin Company, 1922.

Stone, J. C. *How to Teach Primary Number.* B. H. Sanborn, 1923.

Terman, L. M. *The Hygiene of the School Child.* Houghton Mifflin Company, 1914.

- Thorndike, E. L. *The New Methods in Arithmetic.* Rand, McNally & Co., 1921.
- Waddle, C. W. *An Introduction to Child Psychology.* Houghton Mifflin Company, 1918.
- Weeks, R. M. *Socializing the Three R's.* The Macmillan Company, 1919.
- Wells, M. E. *A Project Curriculum.* J. B. Lippincott Company, 1921.
- Wise, Marjorie. *On the Technique of Manuscript Writing.* Charles Scribner's Sons, 1924.

II. FURNITURE AND EQUIPMENT FOR PRIMARY GRADES

It is our purpose to assemble here in condensed form information regarding furniture, equipment, materials, books, and pictures believed to be essential or highly useful in meeting the requirements of liberal practice in primary schools. Detailed information on the equipment of kindergartens is given in Bulletin no. 13, 1921, published by the United States Bureau of Education. As the needs in lower primary grades for large blocks, well-chosen toys, and good physical apparatus is about the same as in the kindergarten, we have avoided for the most part a repetition of items under those heads. An especial effort has been made to offer information regarding materials which might aid in the enrichment of subjects and activities peculiar to primary grades, as this field has not been well covered heretofore. The equipment necessary to the proper development of Industrial Arts is a large subject in itself, and no attempt is made here to indicate the requirements. There are several references in the above bibliography which will furnish valuable information on this subject.

FURNITURE FOR THE MODERN PRIMARY CLASSROOM

Small tables seating one or two children.* Most teachers prefer tables without drawers, depending on cabinets or shelves for materials. Many schools have tables made to order by local firms. The following measurements have been found satisfactory in the Horace Mann School:

First and Second Grades. Top of table for one child 21" \times 18". Top of table for two children 42" \times 18". Height, most of the

tables in first grade, 22"; a few 24". Most of those in second grade 24"; a few 22" and 25".

Chairs — any good model, in heights of 12", 13", and 14". The Mosher chair and the Posture League chair are examples of chairs which satisfy hygienic requirements.

Satisfactory types of tables and chairs are:

The Eclipse Kindergarten Table and Chair. The Theodor Kundtz Co., Cleveland, Ohio.

New York Kindergarten Table and Chair. Scientific Seating Company, 35 Warren Street, New York City.

While these are designated as *kindergarten* tables and chairs, they are made in sizes suitable for primary grades.

Lewis Folding Table — Milton Bradley.

A new type of folding table made to accommodate one or more pupils. Very firm and rigid when open and easy for children to fold. Recommended for kindergarten and elementary classrooms where more floor space is needed at times for larger activities.

Individual cabinets or "lockers" for children's work:

These are often built as a continuous structure along one side of the room, divided into the requisite number of suitable spaces, with or without doors.

A height of 26", depth of 18", and length of 20' will give generous space to thirty children. Divide the length at intervals of 16" and put a shelf 13" from the floor. Each child will then have a space 18" × 16" × 13". This gives room for large drawings and unfinished constructions, such as doll furniture, boats, etc., as well as books, paints, and other materials. The top of the entire structure is most useful, offering space for books, plants, aquarium, toys, and displays of various kinds in easy reach of the children.

ADDRESSES OF FIRMS MENTIONED IN SECTIONS III TO VI INCLUSIVE

Barse and Hopkins, 23 East 26th Street, New York.

Baumgarten & Co., Baltimore, Maryland.

Beckley-Cardy Company, 17-21 East 23d Street, Chicago.

Milton Bradley Company, Springfield, Massachusetts, and 23 • Washington Place, New York.

George P. Brown & Co., 38 Lovett Street, Beverly, Massachusetts.

- Brentano, Fifth Avenue and 27th Street, New York.
Brown-Robertson Company, 415 Madison Avenue, New York.
The Davis Press, 44 Portland Street, Worcester, Massachusetts.
A. Flanagan, 521 South Laflin Street, Chicago.
Samuel Gabriel Sons & Co., Fifth Avenue, New York.
B. Kabatznick (successor to Horace K. Turner Company), 214 Clarendon Street, Boston.
David McKay Company, 604 South Washington Square, Philadelphia.
John Martin's House, 33 West 49th Street, New York.
National Child Welfare Association, 70 Fifth Avenue, New York.
Noble and Noble, 76 Fifth Avenue, New York.
Northwestern School Supply Company, Minneapolis, Minnesota.
The Palmer Company, 120 Boylston Street, Boston.
Perry Picture Company, Malden, Massachusetts.
The Plymouth Press, 6749-51 Wentworth Avenue, Chicago.
The Prang Company, New York, Chicago, Boston, etc.
A. Schoenhut Company, Sepviva and E. Hagert Street, Philadelphia.
F. A. O. Schwarz, Fifth Avenue at 31st Street, New York.
A. G. Seiler, 1224 Amsterdam Avenue, New York.
The University Prints, 11 Boyd Street, Newton, Massachusetts.
W. H. Wheeler and Company, 352 East 22d Street, Chicago.

III. MATERIAL AND APPARATUS FOR TEACHER'S USE IN PREPARING PRINTED AND WRITTEN MATTER FOR WORK IN READING AND LANGUAGE

Printing outfit, usually called "Price and Sign Marker." For printing cards, charts, etc., in large type to be read at a distance of six to ten feet. Approved size of type, capitals, 7/8". Price range for this size, \$3 to \$3.75. Milton Bradley, and other school supply companies.

Small size for use by children or by teacher to print material for individual reading, capitals 1/2". Price about 75 cents. Toy Rubber Printing Outfit, No. 715. Northwestern School Supply Company; or Excelsior A. B. C. Marker, No. 715. Baumgarten & Co.

Superior Type Outfit, No. 17. Type slightly larger than primer size. For teacher's use only. Good for printing a few lines of

reading matter, but setting the type is a tedious process. Any number of copies can be printed after type is set. Price with extra large holder about \$5. A. G. Seiler, 1224 Amsterdam Avenue, New York.

Gelatine duplicator. Known under various names — Duplicopier, Duplicator, Hektograph, etc. One of the quickest and least expensive means of getting multiple copy. Especially good where teacher wishes to use her own free-hand printing. Wide price range according to size, quality, and number of surfaces for printing. For sale by all general school supply companies.

The greatest asset possible in printing fresh, interesting, and immediately significant matter is a good typewriter having extra large or *primer-size* type. On most standard machines, type of this size may be substituted for ordinary type. Manufacturers will furnish information. By cutting a stencil or by using a special typewriter ribbon, quantity production is easy.

IV. ACCESSORY READING MATERIAL

The Plymouth Chart — A wall chart 36" × 35" of heavy paper mounted on wood at top and bottom. Used to hold securely in place any standard printed words for sentence-building as well as all kinds of home-made printed cards and strips. **The Plymouth Press.**

Pupil's Desk Chart — For child's individual use. Adapted to any kind of work that involves the assembling of parts into intelligible printed or script page. About 9" × 8" with ten grooves. **The Plymouth Press.**

Manual Arts Tablets — Mary H. Montieth. Large pads containing pictures for coloring, words and phrases corresponding, for making booklets, charts, etc. Intended to assist in beginning reading. Partly self-verifying. **The Prang Company.**

Bradley Silent Reading Seat Work — Hanthorn and Beattie. 8295, Set 1. 8296, Set 2. Easy reading. Characters and sentences taken from well-known stories. Child is to place correct sentences under each illustration. **Milton Bradley Company.**

Silent Reading Stories — Seat work for second and third grades. Hanthorn and Beattie. Published by the authors. Address Miss M. M. Beattie, 421 S 15th Street, Lincoln, Nebraska.

Mother Goose Puzzle Games — Two sets of four cards each.

Large attractive pictures in color. An accompanying rhyme so arranged that picture may be cut up into puzzle if desired. Rhyme may be cut into either phrases or words. Printed in extra large type. Key card for self-verification of work. Noble and Noble.

Self-verifying Seat Work — Matching words to pictured objects. So constructed that child can tell whether he has selected correct word or not. Milton Bradley Company.

The Silent-Reading Hour — Accessory material. Practice exercises in careful Silent-Reading First Grade Set. 36 sheets and cover. Sample set 25 cents. Second Grade Set. 36 sheets and cover. Sample set 25 cents. Short exposure phrase cards (first grade) for increasing rate and comprehension. 125 cards 18" × 4". W. H. Wheeler & Co.

Action Silent-Reading Cards — A set of fourteen cards about 6" × 9" each with ten sentences for first grade. Pupil is expected to read silently and perform appropriate acts. R 904, 25 cents. Twenty-five cards 3" × 9" with brief, easy directions. R 905, 40 cents. The Plymouth Press.

Silent-Reading Flash Cards — Horn-Shields. "The place of these cards is primarily in the upper half of the First Grade, employed concurrently with whatever reader may be in use." Ginn & Co.

Many of the school readers published in series now have excellent accessory material for the children's own more or less independent work. Among these may be mentioned:

The Boys' and Girls' Readers — Bolenius. Houghton Mifflin Company.

The Elson Readers — Elson, Runkel. Scott, Foresman & Co.

Everyday Classics — Baker and Thorndike. The Macmillan Company.

V. GAMES, TOYS, PUZZLES, AND MATERIALS FOR DESIGN ADAPTED TO CHILDREN'S INDEPENDENT ACTIVITIES

Sectional Animals, No. 4753. Six Animals.

Sectional Birds, No. 4754. Six Birds.

Each completed picture has the name printed in large type on left side. Milton Bradley Company.

Mind-Builder — A set of large well-made wooden letters for spelling. F. A. O. Schwarz.

Art Stencils for Boys and Girls. Alphabet No. 18.

With these patterns children can outline and color large well-formed letters for alphabet books, posters, etc. Brentano.

Spello, The Game of Words. Samuel Gabriel Sons.

Menagerie Stamp Outfit — Set contains dog, cat, cow, elephant, rabbit, parrot, lion, goat, horse, camel, monkey, rooster. Stamps of these and 12 additional stamps with which to print names of animals. Northwestern School Supply Company.

Clock Time Seat Work — Twenty-four different dials showing hours and half-hours. Dials to be arranged in order with word card and figure expressing time denoted on dial. Plymouth Press.

Clock Lotto — On the principle of ordinary Lotto. Teaches children to tell time. Samuel Gabriel Sons.

Bradley Color Designs — Heavy cardboard tablets in six colors. Box containing 150 tablets, 20 cents. Milton Bradley Company.

Parquetry Blocks — Wooden tablets in six standard colors. Box containing 250 blocks, 40 cents. Northwestern School Supply Company.

Mosaic Designer — Good colors, durable, gives effect of real, mosaic work. Large size, No. 1718, \$1.25; smaller size, No. 1741, 75 cents. F. A. O. Schwarz.

Colored Wood Plate Designer — Large wooden framed box, to be used as design board, containing numerous different shaped flat wooden pieces, painted on both sides in bright colors. Many pleasing designs are possible. No. 244, large size, \$1.50; smaller outfit, 50 cents and 75 cents. F. A. O. Schwarz.

Metal Stick-Printing Box — 6 sticks, 3 color caps. Great variety of designs can be made on paper, textiles or wood. The Prang Company.

Abbot Stick-Printing Set No. 1. Northwestern School Supply Company.

Note — After teachers have examined and handled such prepared sets as the two last mentioned, they will see how odds and ends of sticks, bamboo, blocks, new rubber erasers, corks, etc., may be used to make pleasing designs.

Good Zoo Drawing Cards — Outline drawings of animals and birds in natural positions. Helpful to children in illustrating their

- stories. Three sets of 10 cards each ($7'' \times 10''$). Each card shows one animal in different positions. The Davis Press.
- The Animal in Art — Arranged by P. J. Lemos. A portfolio of 10 plates ($7'' \times 10''$), each plate giving several different views of one animal. An excellent aid to children in their independent efforts. The Davis Press.
- Friendly Trees — P. J. Lemos. Many suggestions for tree cut-outs. 16 plates ($7'' \times 10''$). The Davis Press.
- Animal Cut-out Sheets — Domestic animals. Useful in securing good patterns for illustrating booklets, charts, etc. Samuel Gabriel Sons.
- Dissected Map of United States. Cuts on State lines $15'' \times 22''$ mounted on wood. Milton Bradley Company.

GAMES GIVING NUMBER EXPERIENCES

- Lotto — Involves the recognition of number. Suitable for first and second grades. Obtain at any good toy shop, or Milton Bradley Company.
- Spinette — A spinning top is dropped in the midst of small wooden balls which are thereby scattered, some of them coming to rest in numbered holes. Involves addition. For beginners, easier combinations may be secured by pasting slips giving lower value to certain holes. Suited to first and second grades. Milton Bradley Company.
- Parchesi — A well-known game for two to four players. A good deal of number is involved if teachers help children to become more expert in estimating spaces. Suited to second and third grades. Can be obtained at any good toy shop.
- American Jack Straws — Involves writing number below 100 and adding. For steady hands in second grade. Milton Bradley Company.
- Tower Game — Marbles are sent down from top of tower whence they roll into numbered pockets. Involves addition. Suited to second and third grades. Made in three sizes. Middle size, \$1.75. F. A. O. Schwarz.
- What Next? — or Divided Answers. An interesting card game involving multiplication. Suited to third and fourth grade. By omitting the more difficult cards it may be used in advanced second. Milton Bradley Company.
- Moody Number Games — Series I — Addition and Multiplication.

Series II — Subtraction and Division. Self-verifying chart. Suited to third and fourth grade. Beckley, Cardy Company.

VI. PICTURES

The pictures included in this list are intended almost entirely for the children's own work in making booklets, scrapbooks, charts, posters, etc. Large wall pictures are not listed. Such pictures can be obtained, however, from a number of the firms mentioned below.

Copies of Paintings. Postcards.

Metropolitan Museum of Fine Arts, New York.

Boston Museum of Fine Arts, Boston.

Many subjects interesting to children are found in both lists.

Mother Goose Pictures.

Stampkraft Pictures 5 cents per set in quantity. Barse & Hopkins.

Clara Burd Mother Goose Pictures. Small size $3\frac{1}{2}'' \times 5''$. Set of 12, 25 cents. Northwestern School Supply Company.

II. Willebeek Le Mair Post Cards.

Set No. 1. Our Old Nursery rhymes.

Set No. 2. Little Songs of Long Ago.

Delicate color, 12 in a set. 75 cents per set. David McKay Company. Also, John Martin's House.

Mother Goose Silhouettes — Printed on white cardboard with rhyme below. Twelve cards, $11'' \times 14''$. A. Flanagan.

Turner Picture Study Prints — Half-tone reproductions, averaging in size 2×3 inches, made up in packages of ten of a single subject. These are reproductions of famous artists, the subjects carefully selected and graded to suit the taste and interest of children. Price per envelope of ten prints, 5 cents. No orders taken for less than 25 cents. Send for full list to B. Kabatznick.

Miniature Series. 156 subjects $5\frac{1}{2} \times 4$ inches. Send for full list to The University Prints.

Miniature Color Prints — Published 10 to a sheet, gummed and perforated — 5 sheets for \$1.00. No order filled for less than \$1.00. Subjects selected and graded, ten subjects for each of the first eight grades. Brown-Robertson Company.

PICTURES OF CHILD LIFE

Children from many lands. Ten beautiful pictures in color by F. L. Warren, \$1.00 per set. (This is the reduced price quoted in 1924.) National Child Welfare Assoc.

Willebeek Le Mair Post Cards — 12 pictures in each set, 75 cents per set.

Set 6. The Children's Corner.

Set 8. Games and Pastimes.

Set 9. Little People.

Delicate colors. Charming conceptions of children engaged in many and varied activities. David McKay Company.

Twenty Pictures of Children -- Packet E.

Twenty Pictures of Children -- Packet F.

20 pictures in each packet, 25 cents per packet. Brown's Famous Pictures. George F. Brown.

Silhouette Border Patterns.

Book 1 — The Seasons.

Book 2 — Eskimo, Dutch, and Christmas Borders.

40 cents each — Milton Bradley Company.

HIAWATHA

Hiawatha Pictures -- By Rev. A. T. Kempton. Made from photographs of real Indians. 10" × 12". Set of 30 pictures, \$3.00. The Palmer Company.

ANIMALS AND BIRDS

Animal Pictures — in color. 7" × 9". 3 cents each. 22 different subjects. Northwestern School Supply Company.

Fish, Insects, Mammals. 7" × 9". 3 cents each. Perry Picture Company.

Wild Animal Stamp Primer. 49 animal stories. Illustrated by 50 color reproductions of animals from actual photographs taken in the New York Zoölogical Park. Pictures may be used apart from the book. \$1.00. H. R. Mitchell, New York Zoölogical Park.

Animal Art Stamps. 2½" × 8". 10 cents per set of 20 stamps. Address as above.

Brown's Miniature Nature Pictures. Colored pictures of birds. Size 3" × 4". One cent each in lots of 10 or more. Each picture has full description on the back. G. P. Brown & Co.

Birds in Natural Colors. 7" × 9". 3 cents each for 15 or more
Perry Picture Company.

The American Singer Series. In color. 4½" × 6". Free in reasonable quantity to teachers. Descriptive paragraph and advertisement on back. Singer Sewing Machine Company, New York City.

Bird Pictures. In color. No. 2. 2" × 3". Set of 30 at 6 cents. Inconspicuous advertisement on face. Church & Dwight Company, 27 Cedar Street, New York City.

GEOGRAPHY

National Geographic Pictures — A great variety of interesting and authentic views. National Geographical Society, Washington, D.C.

Primary Set of 200 stereographs and lantern slides. See special manual. Keystone View Company, Meadville, Pennsylvania.

VII. REPRESENTATIVE AND DRAMATIC PLAY

As stated above the reader should consult *The Housing and Equipment of Kindergartens* for full list of larger materials and tools for play and construction. A few of the most essential items are mentioned here.

Screen in three or four sections. This is to take the place of buildings constructed with large floor blocks. Children have probably secured the full educational value of such building if they have had the big blocks in kindergarten and first grade. In later primary years they still need an enclosure which may serve as house, shop, theater, library, mill, etc. The right kind of screen is very adaptable and it stimulates and partly controls valuable play activities. Directions for making such a screen may be obtained from Industrial Arts Co-operative Service, Teachers College, Columbia University.

Dolls — Schoenhut All-Wood Dolls — Attractive and durable dolls particularly good for school use. Smaller celluloid dolls, obtainable at any toy shop — should also be furnished.

Animals — Toy animals to use in play of farm life, dramatic play, sand table scenes. Also to serve as models for representation in clay.

, **Textiles** — Inexpensive fabrics such as cheesecloth and cambric in white and colors for costumes which children will make for them-

selves. Old material brought from home and dyed will serve many purposes.

VIII. MUSIC

SONG BOOKS — SINGING GAMES — RHYTHMS

Song Primer. Bentley. Teachers Edition. A. S. Barnes & Co.
Hollis Dann Music Series, Books One, Two, and Three. American Book Company.

Music Education. Second Book. Cady. Clayton F. Summy.

Lilts and Lyrics. Riley and Gaynor. Clayton F. Summy.

Small Songs for Small Singers. Neidlinger. G. Schirmer.

Child Land in Song and Rhythm. Jones-Barbour. Arthur Schmidt.

Universal Music Series. Primer, and Books One and Two. Hines, Eldridge and Noble.

Mother Goose Melodies. Elliott. McLaughlin Brothers.

Children's Singing Games, Old and New. Hofer. A. Flanagan.

School Rhythms for Kindergarten and Primary Grades. Collected by Ethel M. Robinson. Clayton F. Summy.

MUSICAL INSTRUMENTS FOR CHILDREN'S BAND

Drum, 11". Tambourine, 8". Cymbals, 7". Small Triangle. Sleigh bells. Bell plate. Xylophone — 15 bars. Metallophone — 18 notes.

GRAPHOPHONE RECORDS

Records made expressly for rhythmic movements of young children. Selections chosen and recording supervised by Ethel M. Robinson, Helene Kneip and Louise Birch of the Horace Mann Kindergarten, Teachers College. Columbia Phonograph Company, 1819 Broadway, New York.

IX. TEXTBOOKS

READING

There is an embarrassment of riches in the matter of good reading textbooks now available, and it is impossible to pick out six or seven and say, with reason and justice, "These are the best." In selecting this short list the author was guided by the following considerations. To seek —

1. Variety — selecting some books purely literary in content and others containing some realistic material.
2. Books which make possible the use of sound and broad methods of teaching.
3. Those which are very attractive to children.
4. Those which authors and publishers are keeping up to date in the way of manuals and supplementary material.

Titles are arranged in alphabetical order.

Bolenius Readers. Bolenius, E. M. Houghton Mifflin Company.
The Child's World. Browne, H. S., and Withers, S. B. F. Johnson Company.

The Elson Readers. Elson, W. H., and Runkel, L. E. Scott, Foresman & Co.

Everyday Classics. Baker, F. T., and Thorndike, A. H. The Macmillan Company.

Reading-Literature. Treadwell, H. T., and Free, M. Row, Peterson & Co.

The Silent-Reading Hour. Buswell, G. T., and Wheeler, W. H. W. H. Wheeler & Co.

The Winston Readers. Firman, S. G., and Maltby, E. H. J. C. Winston Company.

ARITHMETIC

Many teachers prefer not to put an arithmetic text into the children's hands below the third grade. For those who wish to make some use of a book at an earlier stage the following texts are recommended:

First Journeys in Numberland. Harris, Ada Van Stone. Scott, Foresman & Co.

First Year in Number. Hoyt, F. S., and Peet, H. E. Houghton Mifflin Company.

A Child's Book of Number. Stone, J. C. Benjamin Sanborn.

X. THE CHILDREN'S OWN LIBRARY

For independent reading, for the social reading hour, and for reference.

PICTURE BOOKS FOR KINDERGARTEN AND FIRST GRADE

Caldecott Picture Books. F. Warne.

Hey Diddle Diddle Picture Book.

Picture Book No. 2.

Pictures in color by Ralph Caldecott.

Walter Crane Picture Books. John Lane.

This Little Pig.

Old Mother Hubbard.

The Three Bears.

Sing a Song of Sixpence.

The Fairy Ship.

Pictures in color by Walter Crane.

Four and Twenty Toilers. Lucas. McDivitt and Wilson.

The Chicken World. E. Boyd Smith. G. P. Putnam's Sons.

The Farm Book. E. Boyd Smith. Houghton Mifflin Company.

A Book of Cheerful Cats. J. G. Francis. Century Company.

The White Puppy Book. Cecil Aldin. Doubleday, Page & Co.

Clean Peter. Adelborg. Longmans, Green & Co.

COLLECTIONS OF MOTHER GOOSE RHYMES

All except the first book in this list have many delightful pictures in color.

A Book of Nursery Rhymes. Charles Welsh. D. C. Heath & Co.

Small inexpensive edition. Good for school use when higher-priced books cannot be secured.

Mother Goose. Illustrated by Kate Greenaway. F. Warne.

Small book containing only limited number of short rhymes.

A Nursery Rhyme Picture Book. Lang. Illustrations by Leslie Brooke. F. Warne.

Not a full collection of rhymes, but very delightful pictures.

Mother Goose. Illustrations by E. Boyd Smith. G. P. Putnam's Sons.

Large collection. Pictures show particularly humorous treatment of subjects.

The Real Mother Goose. Blanche Wright Fisher. Rand, McNally & Co.

From every point of view, one of the most satisfactory editions.

The Jessie Willcox Smith Mother Goose. Dodd, Mead & Co.

Excellent collection. Many full-page illustrations.

Jessie Willcox Smith Little Mother Goose.

Small reproduction of above edition at a lower price.

A Big Book of Nursery Rhymes. Walter Jerrold. Illustrations by Charles Robinson. E. P. Dutton & Co.

Excellent collection, charming pictures. Book too large for small children to handle.

Old Mother Goose Nursery Rhyme Book. Illustrations by Anne Anderson. T. C. and E. C. Jack, London. F. A. Stokes Company, New York.

An exceptionally beautiful edition. Too costly for the ordinary school library.

FIRST GRADE

A Apple Pie. Kate Greenaway. F. Warne.

The A.B.C. Book. Designed and cut on wood by C. B. Falls. Doubleday, Page & Co.

The Edward Lear Alphabet Book. Illustrated by F. Richardson. Reilly & Lee, Chicago.

Little Black Sambo. Helen Bannerman. F. A. Stokes Company.

The F.U.N. Book. La Rue. The Macmillan Company.

A Little Book of Well-Known Toys. Braden. Rand, McNally & Co.

Johnny Crow's Garden. (In rhyme.) Leslie Brooke. F. Warne.

The Dutch Twins' Primer. Perkins. Houghton Mifflin Company.

The Tale of Tibby and Tabby. Skinner. Duffield.

Work-a-day Doings. Serl and Evans. Silver, Burdett & Co.

The Cook's Surprise. (In rhyme.) Clark. Doubleday, Page & Co.

Nursery Tales from Many Lands. Skinner. Charles Scribner's Sons.

Three Blind Mice. (In rhyme.) Ivimey. F. Warne.

The Cock, the Mouse, and the Little Red Hen. Lefèvre. Jacobs.

Cherry Tree Children. Blaisdell. Little, Brown & Co.

Bow-Wow and Mew-Mew. Craik. Charles E. Merrill Company.

SECOND GRADE

Folk- and Fairy-Tales — Modern Fanciful Tales

The Tale of Peter Rabbit. Beatrix Potter. F. Warne.

The Bojabi Tree. Edith Rickert. Doubleday, Page & Co.

The Story of Mrs. Tubbs. Hugh Lofting. F. A. Stokes Company.
Little Dog Ready. Mabel F. Stryker. Henry Holt & Co.

Picture Tales from the Russian. Valery Carrick. F. A. Stokes Company.

Six Little Ducklings. Katherine Pyle. Dodd, Mead & Co.

Raggedy Ann. Johnny Gruelle. Volland.

Grasshopper Green and the Meadow Mice. John Rae. Volland.

Injun Babies. Maynard Dixon. G. P. Putnam's Sons.

The Golden Goose Book. Leslie Brooke. F. Warne.

The House in the Wood. Leslie Brooke. F. Warne.

Old Mother West Wind. T. W. Burgess. Little, Brown & Co.

Realistic Stories, or Stories which might be True

Five Little Friends. S. W. Adams. The Macmillan Company.
Bobby of Cloverfield Farm. Helen F. Orton. F. A. Stokes Company.

The Dutch Twins. Lucy F. Perkins. Houghton Mifflin Company.

The Eskimo Twins. Lucy F. Perkins. Houghton Mifflin Company.

Peter and Polly in Autumn. Rose Lucia. American Book Company.

Peter and Polly in Winter. Rose Lucia. American Book Company.
Nan and Ned in Holland. Olmstead and Grant. Row, Peterson & Co.

About Harriet. Clara Hunt. Houghton Mifflin Company.

Wee Ann. E. C. Phillips. Houghton Mifflin Company.

Seven O'Clock Stories. Robert G. Anderson. G. P. Putnam's Sons. (Part of these stories are fanciful in character.)

The Twins and Tabitha. Constance Heward. Jacobs.

Charlie and His Puppy Bingo. Hill and Maxell. The Macmillan Company.

Reading to Find Out. Frances Ross. The Macmillan Company

Nature Stories — Stories of Primitive Life

Plant Life. Florence Bass. D. C. Heath & Co.

Animal Life. Florence Bass. D. C. Heath & Co.

The Children's Hour with Birds. Watty Piper. Platt-Munk.

Red Feather. M. E. Morcomb. Lyons and Carnahan.

Fishing and Hunting. Dutton. American Book Company.

The Tree Dwellers. Dopp. Rand, McNally & Co.

The Early Cave-Men. Dopp. Rand, McNally & Co.
Little Indian Folk. Deming. F. A. Stokes Company.
American Animal Life. Deming. F. A. Stokes Company.

THIRD GRADE

Folk- and Fairy-Tales — Modern Fanciful Tales

East O' the Sun and West O' the Moon. Thomsen. Row, Peterson & Co.

More Picture Tales from the Russian. Carrick. F. A. Stokes Company.

Book of Fables and Folk-Stories. Scudder. Illustrated by Maurice Day. Houghton Mifflin Company.

Merry Animal Tales. Bigham. Rand, McNally & Co.

As the Goose Flies. Katherine Pyle. Little, Brown & Co.

Perez, the Mouse. Padre Louis Coloma. Adapted from the Spanish by Lady Moreton. Dodd, Mead & Co.

Andersen's Fairy-Tales. Selected and Edited by E. E. Turpin. Maynard, Merrill.

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This Singing World. Louis Untermeyer. Harcourt-Brace Company. A collection of modern verse intended for older children and young people. Contains a few selections suitable for primary grades.

XI. MAGAZINES FOR YOUNGER CHILDREN

Child Life. Monthly. Rand, McNally & Co., Chicago.

John Martin's Book. Monthly. John Martin's House, New York.

The Nature Magazine. Monthly. 1214 Sixteenth Street, Washington, D.C. This magazine should be in every elementary school.

The Merry-Go-Round. Monthly. Basil Blackwell, Oxford, England.

A small section is devoted to the younger children in the following periodicals:

St. Nicholas. Monthly. Century Publishing Company, New York.

Youth's Companion. Weekly. Perry Mason Company, Boston.

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